

# MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

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BALTIMORE, OCTOBER 18, 1884.

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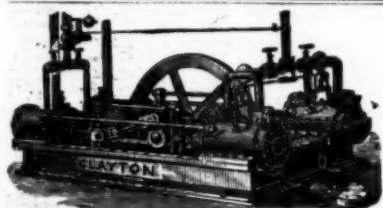
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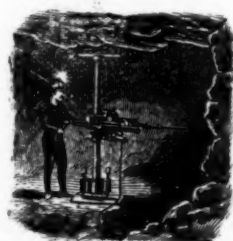
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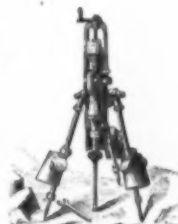
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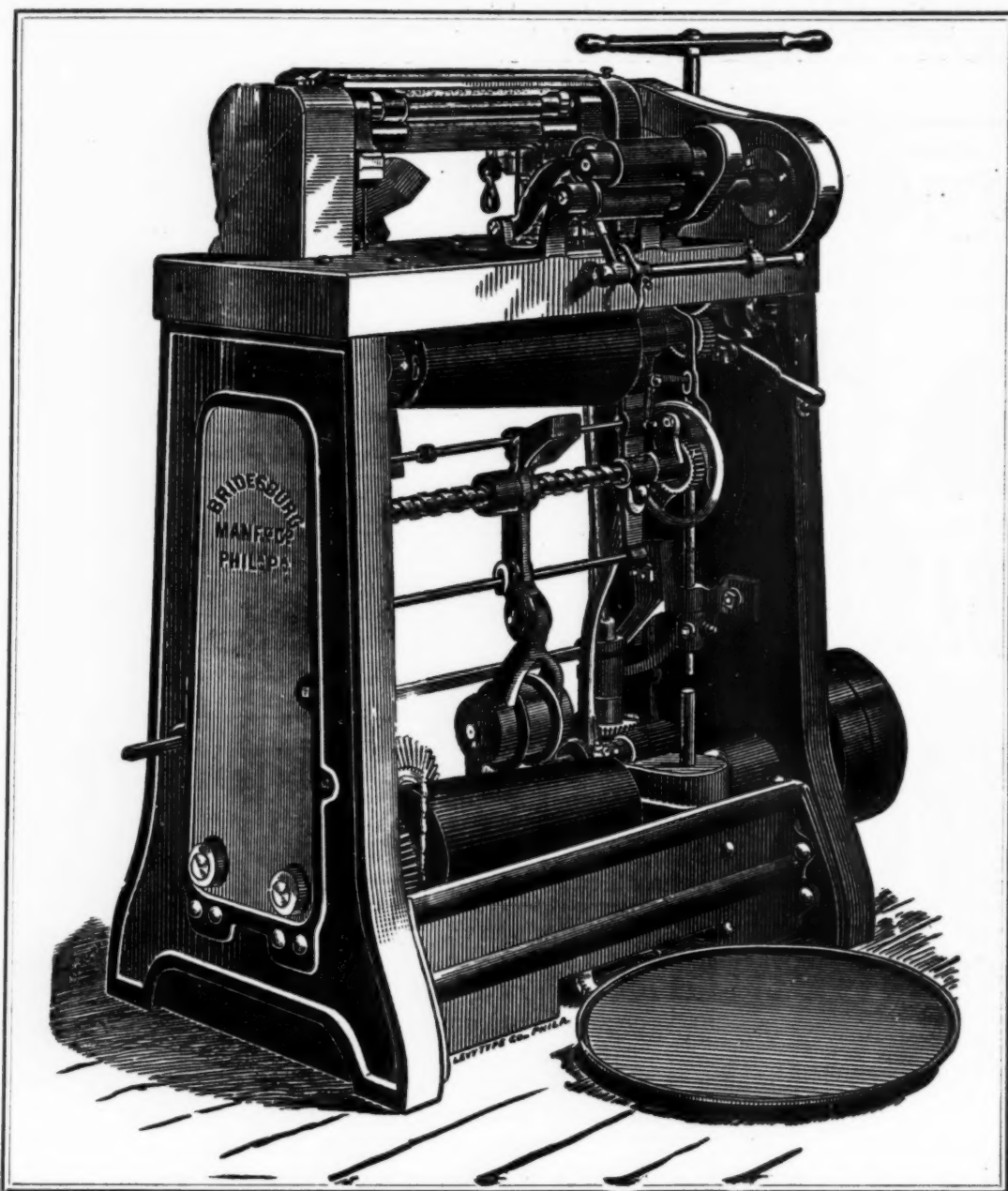
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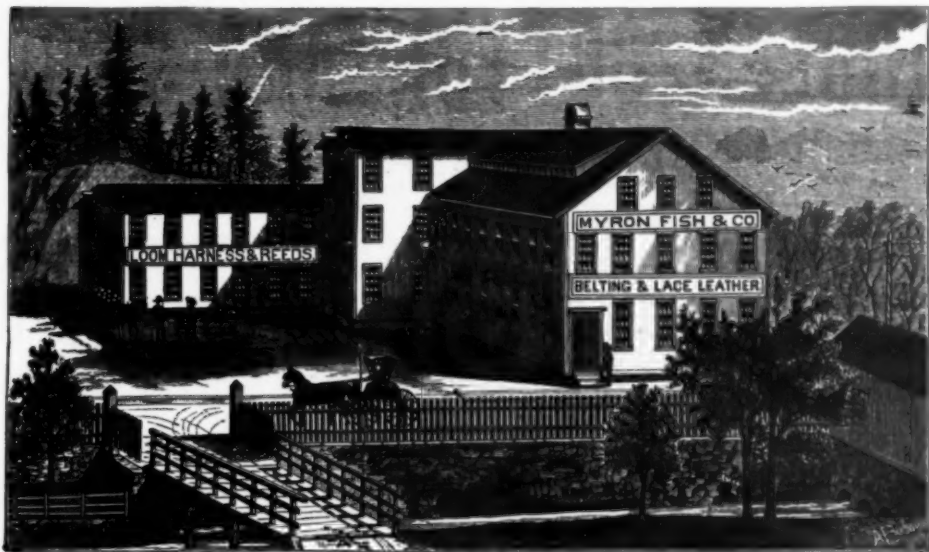
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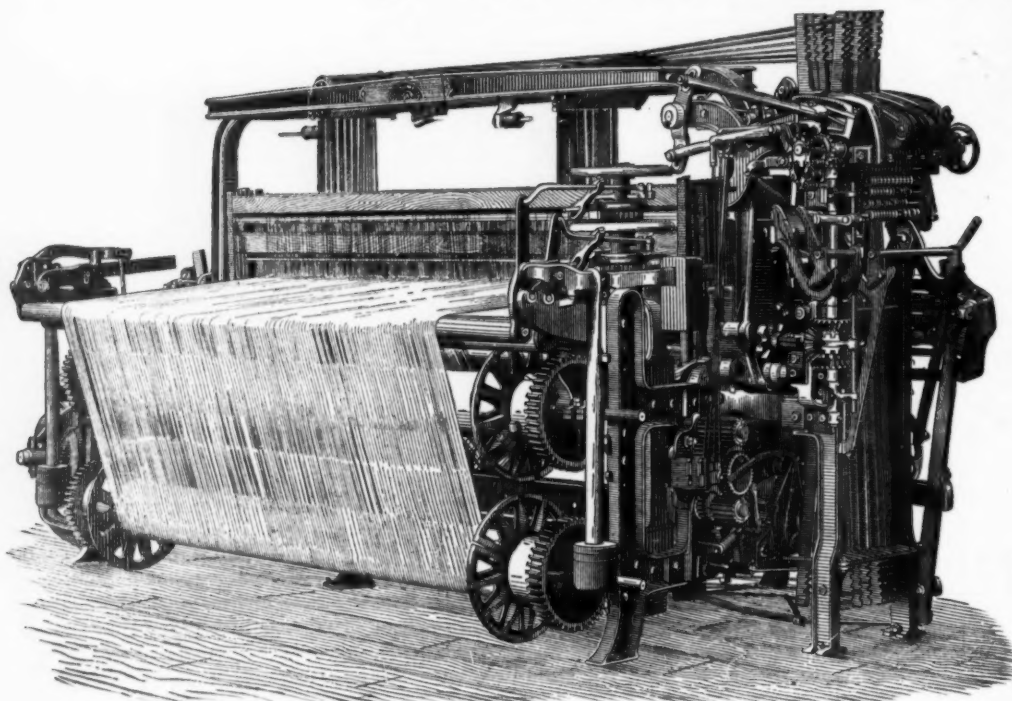
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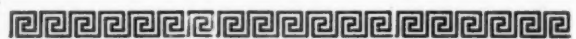
With "1883" box motion, is superior for Flannels and Blankets, and is built of any desired width and SHUTTLE-BOX capacity, and with two, three, four and five-leaf cam.

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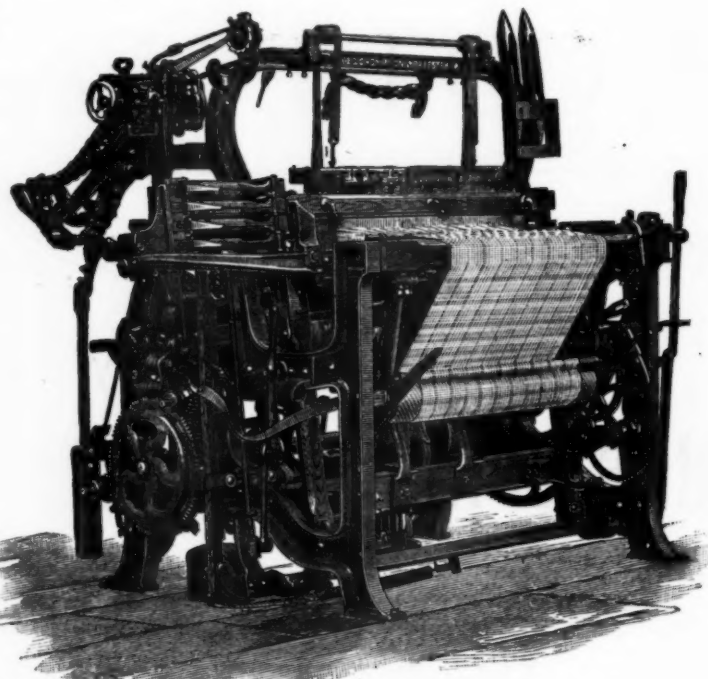
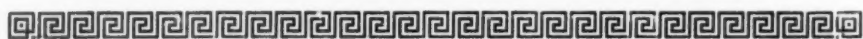
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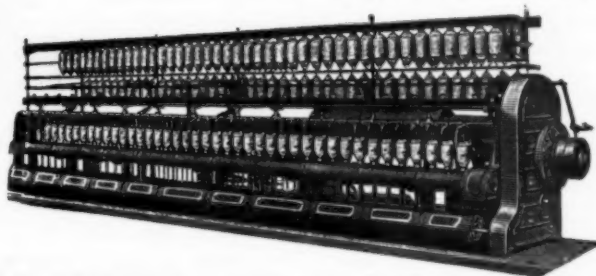
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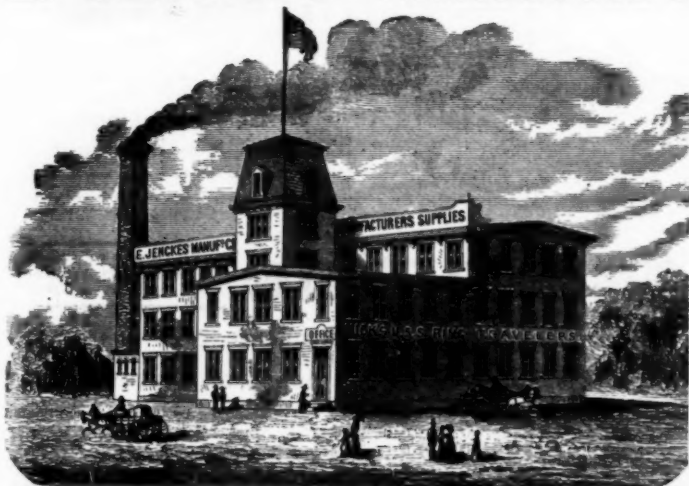
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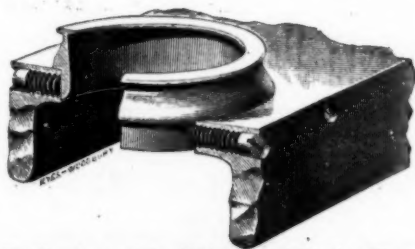
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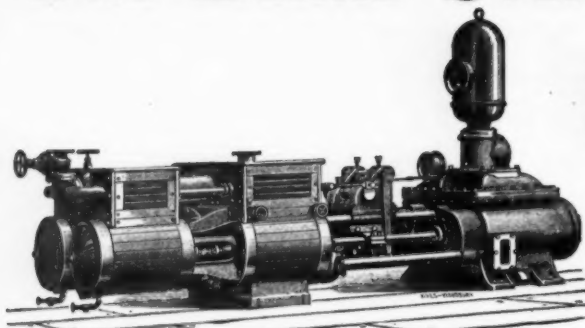
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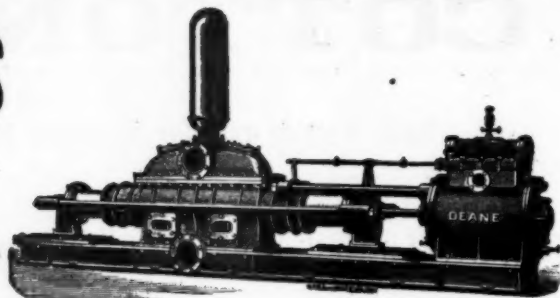
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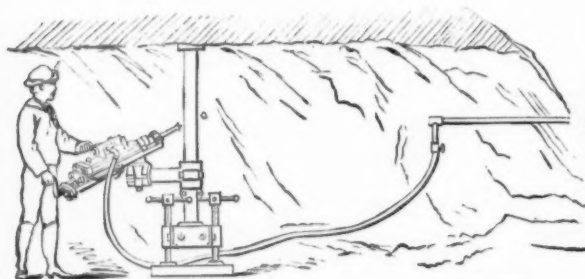
Single, Duplex, Compound, Condensing or Non-Condensing.  
Estimates furnished on application.



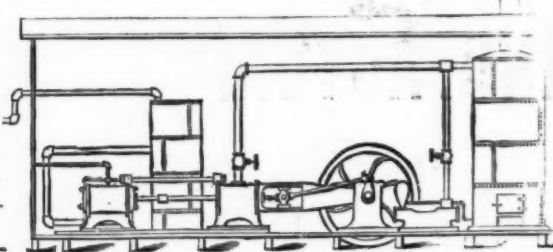
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Our Patent Double-Plunger Sinking Pump has been adopted by the leading mines.

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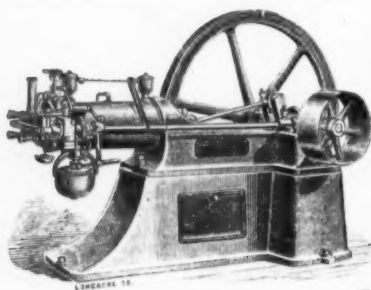
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## RAND DRILL CO.

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Rock Drills,  
Air Compressors, and  
General Mining Machinery,  
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Blasting Batteries and Fuse.



Over 14,000 in Use.

## Otto Gas Engine

20 to 70 per ct. less Gas consumption than ANY other ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

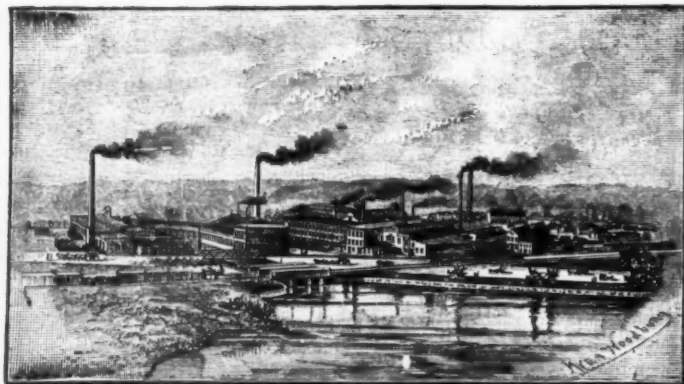
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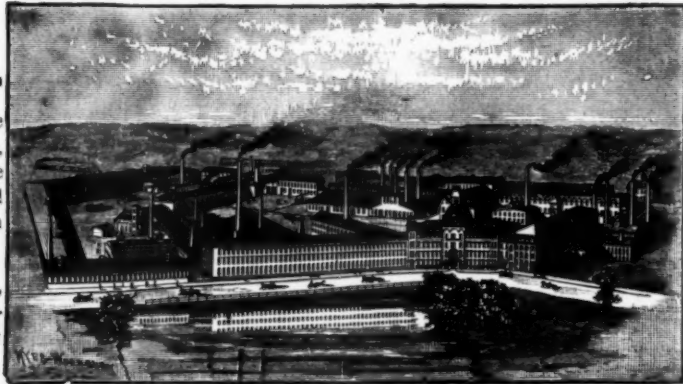
Wire Drawers, and Manufacturers of Iron and Steel Wire of Every Description



Iron and Steel Telegraph and Telephone Wire.

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### The Perfection Scale.

The Perfection Scale was designed and perfected for the purpose of relieving the merchant from the trouble of exchanging weights, the liability to error in so doing, the loss arising from the accumulation of gum or dirt on loose weights rendering them inaccurate, and the necessity of giving down weight or a little more than exact weight at each weighing.

The losses arising from these oft-repeated sources are much greater than is generally supposed, and in cases where poor or badly worn scales are used often amounts to enough to entirely destroy what otherwise would be a fair business profit, and the merchant is surprised at the close of a year of hard work and close attention to business that he has made no money.

In the accompanying cut, showing arrangement of the weights, 1, 2, 3, etc., are the weights suspended on a bracket and held one above another, with regular intervals of space between them, and just above and in

### Annual Report of the Chief of the Bureau of Statistics.

Mr. Jos. Nimmo, Jr., chief of the Washington Bureau of Statistics, in his annual report shows that the value of the products of the various industries of the United States is seven times the total value of our foreign commerce, nearly three times the total value of the foreign commerce of Great Britain and Ireland, and five times the total value of the foreign commerce of France, including in each case both imports and exports. The total value of the products of industry in the United States is also shown to be a little more than twice the total value of the exports of merchandise from all the countries of Europe.

The United States is now the largest manufacturing country on the globe. The value of products of American manufacture consumed at home is five times the value of the manufactured products of Great Britain and Ireland exported to all other countries, and more than fourteen times the value of

have from the beginning marked the commercial and industrial growth of the country, he says: "Experience has proved these fluctuations to be but symptoms of an exuberant and uncontrollable spirit of enterprise, outrunning the possibilities of a healthy and well proportioned development, even in this land of abounding natural resources."

### Railroads and Immigration to the South.

The MANUFACTURERS' RECORD, in setting forth the importance of attracting immigration to the South, has repeatedly called attention to the great work done by the railroads of the Western States, in making known the advantages of the country tributary to their lines, and at the same time has suggested that the railroads of the South would also find it very profitable to devote much attention to immigration. This they are now doing to a larger extent we believe, than ever before, though for some years a number of Southern railroad managers have been very earnest in their efforts to attract immigration and capital to the South. In fact, the wonderful progress of the Southern States during the last five years is very largely due to the direct influence of railroads, and now that all the railroad companies of the South are so thoroughly imbued with the importance to their own property as well as to their country of immigration, we may confidently look for a greater advance in that direction than ever before.

Of late quite a number of valuable pamphlets designed to show the advantages of various sections of the South have been issued by railroads for distribution throughout the country. Some of them are particularly meritorious, not only for the attractive manner in which they are gotten up, but also for the full and reliable information furnished. One of this kind has just been issued by the Seaboard Air Line, of which Mr. John M. Robinson, of Baltimore, is the president, which deserves to have the widest circulation, as it gives in compact form just the kind of information needed. The region described in this pamphlet is that traversed by the lines of the railroad composing the Seaboard Air Line which begins at Portsmouth, Va., and ends at the extreme southwestern limit of the Piedmont section, of North Carolina. Of this territory it is said that it is as "healthy as any part of the world, and embraces every variety of climate except the extremes of heat and cold. It is as free from all forms of epidemic or malignant disease as any habitable part of the continent, and cannot be surpassed by any section of equal area in the variety and affluence of its resources. The finest water powers are to be found everywhere throughout its limits; every agricultural product, every vegetable, and every fruit that can be grown outside of a semi-tropical climate may be cultivated in it successfully; it is rich in coal, iron, gold, copper, the finest building stones, etc.; it is especially rich in timber of many kinds; and the lands which produce these important articles of commerce can be bought at incredibly low prices."

After giving some general information about North Carolina, the writer of this pamphlet presents a short account of each county traversed by this road and also of each town along the line. The information thus given is direct and to the point. It tells of the climate, the soil, the price of land, the water power, the manufacturing enterprises already in existence, and other things of the same kind, giving just the information needed. We would like to see every railroad in the South follow the example of this line, and, avoiding extravagant statements, publish pamphlets that will give the exact condition of affairs and the advantages for capitalists as well as for others. Printed matter of this kind widely distributed will do an immense amount of good for the South.

### A Very Unwise Policy.

Under the caption of "A Great Oversight," the Sawmill Gazette, of a late date, tells the following interesting little story:

"We know a very successful business man of this city whose time is so valuable that it is almost impossible to obtain an interview with him unless the business is important; who never permits a paper or a circular to pass from his hands until he understands exactly what it contains. The writer once asked him why he pursued this policy, and suggested that a great many people threw circulars in the waste-basket without even glancing at them.

"Said he: 'A business man who will do such a thing as that is a fool. I have often obtained information of the very greatest value to me from publications coming to my office, which, at first glance, I have been tempted to throw aside as probably containing nothing of special interest. This has happened so many times that I now never dream of throwing a paper away until I have looked it over carefully. Of course, I do not spend a great deal of time over each paper, but I glance it over page by page, and if I see anything, either in the reading matter or advertising columns of interest to me, I mark it and lay the paper aside for future use. I make it a point to look over the advertisements just as carefully as I do any part of the paper.'

"What business man can say that the above is not a correct view to take of this matter? The time consumed in looking over all the papers that a business man receives is not very great. The writer has known of a good many instances where men have discovered in the advertising columns descriptions of machines, tools, or other things which they had never heard of before, but which they were able to use to the very greatest advantage in their business. Every man, therefore, ought to read the advertisements with as much attention, at least, as he does any part of the paper.

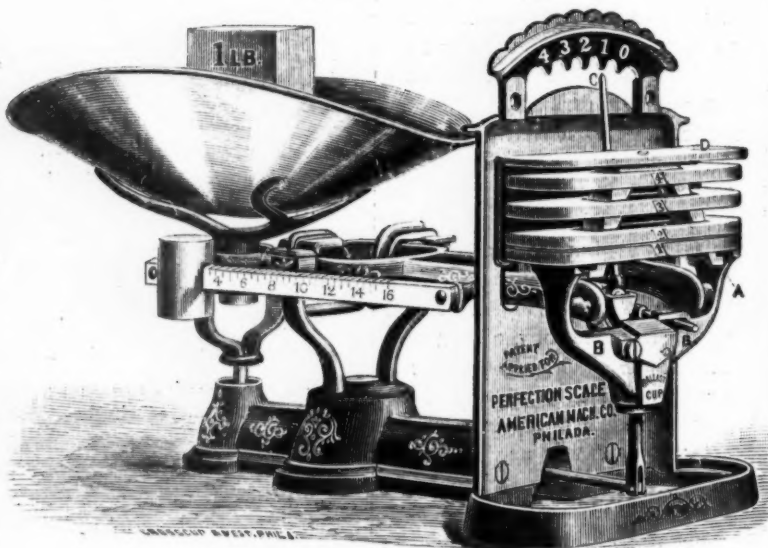
"There is one point which we should like to make right here, and that is, that when a man writes to an advertiser he should in all cases mention the name of the paper in which he has seen the advertisement or notice. It is a great injustice to a publisher when this is not done, because the advertiser has no other means of knowing that his announcement is doing him good. Frequently large sales of machinery are made to people who have first become acquainted with the machines from examining an advertisement; while the maker—because his customer did not state where he saw the advertisement—is left entirely in the dark as to which paper to give credit for the sale.

"So many improvements are being brought out all the time in connection with wood-working machinery, engines, boilers, etc., that the man who does not give some attention to the trade journals published in these interests is sure to be left behind in the race for success."

The success of trade papers so far has proved conclusively that the leading and most enterprising establishments have been convinced of their value as an advertising medium. The day is not far distant when all manufacturers, of whatever class, will recognize the fact that the journal published directly in their interests is the one for them to advertise in. The principal reason for this is that a journal of this kind has one class of readers, and they are the very ones the advertiser wants to reach. In a trade paper, then, he only pays for just what he receives. How many advertisers ever think of this? A trade paper with only 5,000 circulation is a much cheaper and better advertising medium for the manufacturer than a newspaper with ten times the circulation, at the same price per inch. We never look for a manufacturer's advertisement in a daily or even a weekly newspaper, but if we want anything in any particular



THE PERFECTION SCALE.



THE PERFECTION SCALE.

position to be acted upon by the weight jack B B resting on the lever pivots. The arrangement is such that as goods are placed in the scoop the lever will turn, first raising the bottom weight off its seat A, and then adding the others, one after another until the lever turns sufficiently to raise them all off their seats on the bracket, when they will be resting on the lever.

The index finger is so arranged that it will move from one figure on the dial to the next just at the precise time such weight is balanced with goods and raised.

Thus in the cut one pound placed in the scoop just raises weight 1 off its seat A, and moves the index finger slowly up to figure 1 on the dial. Should another pound now be added in the scoop it would raise weight 2 with the first and bring the index finger to the figure 2 on the dial, and so on.

The Perfection Scale is carefully sealed to the U. S. Standard, and can always be relied on as correct. For prices and catalogues, address American Machine Co., Philadelphia.

the exports of manufactured products from France to all other countries.

The relative value of the internal as compared with the foreign commerce of the country is also illustrated by statements showing that 99 per cent of the coal mined in this country, 95 per cent of our iron and steel products, 95 per cent of the products of our cattle industries, more than 99 per cent of our manufactures of wool, 95 per cent of the products of our cotton manufactures, more than 99 per cent of our manufactures of silk, and 97 per cent of our manufactures of glass, glassware, earthenware and stoneware are consumed in the United States.

Mr. Nimmo sets forth the conditions which restrain a large and general exportation of American manufactures, and also the conditions favorable to the exportation of certain articles of American manufacture.—Referring to periods of phenomenal prosperity and of phenomenal depression which

line of goods, we look in the paper representing that line for the advertisements of the leading manufacturers.

With a little practice the busiest business man can learn to take in the contents of an ordinary journal in a few minutes, and nine men out of ten who acquire this commendable habit will come across something that will more than repay them for the time and trouble. We agree with our contemporary in the opinion that the man who receives a trade journal and throws it in the wastebasket without at least glancing over it carefully, even if he does not read it attentively, is extremely unwise, not to put it any stronger than that.—*Cincinnati Artisan*.

## Tennessee's Immense Timber Resources.

ATLANTA, GA., Oct. 11th, 1884.

Editor *Baltimore Manufacturers' Record*:

Mr. C. H. Well's article (Wealth in Wood) has interested me, and, in view of his giving Tennessee so prominent a place, I am prompted to briefly report the result of a recent journey in that State searching for timber.

Leaving the Cincinnati Southern Railway at Glen Mary station in Scott county, Tennessee, we (myself and a gentleman from this city) travelled west about seven miles, when we found ourselves upon the true table-land of the Cumberland mountains where for thirteen (13) miles the land, so far as contour is concerned, seemed but little rougher than western prairies; the timber was mostly yellow pine, very abundant, from 1 to 2½ feet in diameter, very straight, and some of it 70 feet high without prongs.

Passing through what seemed to be quite a thrifty German settlement, recently located in Fentress county by some Michigan and Pennsylvania parties, we soon came to the western escarpment of the plateau, from which point into the valley, the descent is quite abrupt,—the difference in elevation being about 900 feet. We soon reached the mouth of Buffalo Cove Creek on the waters of Obeyes river, known as the East-fork, where we found the largest and most perfect white oak, poplar, hickory, ash and chestnut oak timber I ever saw. Measuring some of the poplar we found them nineteen (19) feet in circumference or six feet, four inches in diameter; some white oaks we measured were over four and nearly five (5) feet in diameter.

Of course, these are exceptional, but from them one can judge of the general character of the timber. We measured one poplar which all agreed would not make less than 6,000 feet of clear lumber, so far at least as indicated by the surface.

From this point, up the East-fork, along the slopes from the table-land for at least twenty miles, there seems to be an uninterrupted succession of coves, whose sides contain more timber per acre than can be found anywhere else in the Southern States.

I was credibly informed that timber could be delivered on the wharf at Nashville, Tenn., (I mean simply cost of floating) for \$3.00 per thousand feet; in fact, a very responsible party offered to be bound by contract to deliver sawed lumber from the mouth of Buffalo Cove Creek on the wharf at Nashville for that amount, and admitted he could make money by doing so.

I have purchased large bodies of timber in that section, and control by contract a great deal more.

Not being a timber man, I made the purchases based upon my faith in the section as a most advantageous site for lumbering on a large scale, hence am prepared to dispose of my interests or remain an interested party to their development.

The coal in the section referred to is of excellent quality. I measured one vein 6 feet 4 inches thick; it had a slate roof apparently 20 feet thick and the fire clay bottom was quite six feet thick. Coal seemed very hard and pure; a piece of it when struck against a rock sounded as one can imagine a piece of chinaware would.

As Safford, in "Geology of Tennessee," states that the "coal measures are co-extensive with the plateau," indications are entirely point to that section as being the most promising coal field South; for miles there is no evidence of disturbances in the formation. Yours very respectfully,

JAS. N. CLARKE,

48 E. Alabama street.

## Augusta's (Ga.) Manufactures.

A Grand Total of Nearly Eight Millions of Capital Doing Business There.

SOUTHERN OFFICE,  
BALTIMORE MANUFACTURERS' RECORD,  
ATLANTA, GA., Oct. 12, 1884.

I have spent a while in Augusta, and made some business and manufacturing investigations there, whose results I give to the readers of the MANUFACTURERS' RECORD. The statistics of manufacturing are based upon actual examination and report of industries, but include several factories and establishments which are located outside of, but near Augusta, but which have central offices in that city and do all their business and make their purchases and sales there.

Before going specifically into the matter of these manufactures, let me first premise by saying that Augusta is a city of 36,521 people, a gain since 1880 of 14,630. In 1880 her whole manufacturing establishments were 86 including those in the county with \$2,402,275 of capital, working 1,958 hands, paying \$527,700 wages, using \$2,466,570 of material and creating \$3,490,780 of products. Now the manufactures stand, 247 establishments; working 6,091 hands; paying \$1,694,450 wages, and creating \$9,222,284 of products.

Augusta is the best inland cotton mart in the South. There are peculiar advantages that she enjoys. Her river facilities which no other city enjoys give her a decided advantage. The mills here make a demand for manufacturing purposes alone of 76,000 bales of cotton annually. One of these mills is a waste mill, so that there is always a market here for inferior and faulty cotton, as there is a factory to use such material. Augusta has 34 counties, 25 in Georgia and 9 in South Carolina, that are tributary to her that produce 440,000 bales of cotton. She has warehouses that will hold 60,000 bales of cotton at any one time. She has a compress with a capacity of 300,000 bales in a year. There is always demand for cotton there. Buyers congregate there for eastern mills as well as for foreign markets. Spinners in Germany, England, France, Russia, and Italy, buy there. Augusta has 5 sea ports to draw from to which she is connected by railroads,—Savannah, Charleston, Port Royal, Wilmington and Norfolk. Augusta fell off in her cotton receipts last year, but less than Memphis, New Orleans, Galveston, Mobile, Savannah, Charleston or Norfolk.

Augusta has 8 railroads built and running into her limits and two more building. The country tributary to Augusta has 112 millions of wealth, raises 30 million dollars worth of crops, has 9 million dollars worth of live stock, does 22 millions of merchandise in her country towns, reports 25 millions of cash money and has lands worth 50 millions.

Augusta's banks do a business of 200 millions yearly, one bank alone transacting \$75,000,000 of matters. The collections run to 17 millions and exchange 10 millions. Sometimes 7,000 bales of cotton are bought in a single day, which would require \$350,000. The receipts of cotton do not measure the cotton business of the city, as large quantities of cotton are bought in Augusta from other points.

Augusta is the only trading point on the Savannah river which is 450 miles long and can be used for 398 miles, or 248 from the sea to Augusta, and for smaller boats 150 miles above. The river runs along 12 counties in Georgia and 6 in South Carolina, and their wealth is 74 million dollars, farm crops 16 million, cotton 195,000 bales; grain 6,500,000 bushels.

The business of Augusta makes an aggregate of \$54,722,284. Of this we have

Wholesale.....	\$22,200,000
Retail.....	13,750,000
Manufactures.....	10,272,284
Cotton Trade.....	6,500,000
Miscellaneous.....	2,000,000

\$54,722,284

In the wholesale trade are 143 merchants. The largest items are:

	FIRMS.	SALES.
Groceries.....	23	\$11,000,000
Dry Goods.....	9	1,730,000
Commission.....	42	3,000,000
Cigars and Tobacco.....	8	1,330,000
Liquor.....	5	1,050,000
Boots and Shoes.....	5	1,100,000
Brokers.....	11	1,000,000
Drugs.....	6	360,000
Clothing.....	11	450,000
Hardware.....	7	400,000
Furniture.....	7	450,000

The retail trade goes to \$13,750,000, and there are 662 dealers. The heaviest trade is in groceries, of which there are 223 merchants, doing \$3,000,000 business. Augusta has the best family grocery stores in the State. Among the larger retail trades are:

	STORES.	SALES.
Liquor.....	91	\$1,700,000
Boots, &c.....	11	1,300,000
Clothing.....	30	1,100,000
Dry Goods.....	17	1,000,000
Mule Sellers.....	8	440,000
Agricultural Implements.....	7	500,000

The real estate of Augusta has grown \$5,000,000 since 1880, a good advance in 4 years, and over 1,000 new houses have been built; two million-dollar cotton factories have been put up. Of the 5 million, one-half is property exempted from taxation to encourage manufacturers. And of the 5 millions, not over one-fifth has been foreign capital, four-fifths being home capital.

Augusta owes \$2,051,000 of bonded debt, and owns \$2,140,000 of property. Of her debt of \$2,051,000, the city has retired by purchase into a sinking fund \$284,522, leaving outstanding \$1,766,478 only of debt to be paid. Her income is \$488,440, and her expenditures \$470,574. Her bonds are worth, according to late sales, from \$105 to \$112. So Augusta owns more property than she owes debt, and her wealth is growing, while her indebtedness is diminishing.

Augusta's system of schools is magnificent. The enrolled scholars number 5,343, of which 3,086 are white and 2,257 black; there are 50 teachers; the expenditure is \$38,798, or \$7.26 on the pupil. The Richmond Academy is the oldest seminary in the State, being founded in 1780. There is the Houghton Institute, with 405 pupils, the St. Mary's Academy, the Sacred Heart Academy, the Augusta Business College and Pelot Commercial Institute, and the Medical College, which is a part of the State University.

In the matter of health, Augusta has the best drainage and sewage in the South, and the lowest rate of mortality of any city in Georgia. The death rate per 1,000 people was in 1881, 29.56; 1882, 24.85; 1883, 21.45; showing a steady decrease in the mortality and an improving health. In Atlanta it was 21.74 or higher than Augusta.

I give you in conclusion the table of manufactures:

	Capital.	H'nds.	Products
11 Cotton mills.....	\$5,375,000	3,800	\$4,169,284
14 Bakers.....	37,800	44	200,000
1 Barrels.....	26,500	40	73,000
30 Blacksmiths.....	27,000	105	150,000
1 Blank books.....	3,000	12	18,000
2 Bottlers.....	25,000	24	60,000
3 Bricks.....	100,000	250	165,000
1 Brooms.....	600	6	10,000
3 Builders' goods.....	390,000	700	1,820,000
6 Candy.....	354,000	34	85,000
17 Carpenters, builders, and cabinet makers.....	253,400	546	463,000
2 Castings.....	50,000	136	165,000
1 Fertilizers.....	800,000	150	275,000
40 Dressmakers & milliners.....	46,200	287	175,000
4 Flour mills.....	367,800	115	975,000
1 Paper mill.....	90,000	60	225,000
24 Harbers.....	4,800	70	25,000
1 Bell hanger, etc.....	1,300	2	4,000
3 Tobacco.....	15,000	25	45,000
1 Cotton gins.....	20,000	25	50,000
1 Compress company.....	150,000	20	50,000
3 Dyes.....	5,000	20	15,000
1 Gas company.....	179,480	20	60,000
1 Gunsmiths.....	3,800	8	6,000
1 Oil mill.....	25,000	10	30,000
2 Ice.....	58,000	20	120,000
5 Mattress.....	15,000	25	25,000
6 Tailors.....	62,400	100	100,000
4 Newspapers.....	100,000	140	100,000
4 Patent medicines.....	20,000	25	100,000
1 Railroad shop.....	90,000	160	214,000
3 Wagons, etc.....	85,000	90	214,000
18 Restaurants.....	12,000	50	50,000
28 Miscellaneous.....	30,000	60	50,000
250.....	\$7,904,685	7,182	\$10,272,284

Augusta is a beautiful city too. It is laid off in broad shaded streets lined with elegant stores and residences, and adorned with fountains, monuments, and a park; it is the home of wealth and culture; it has imperial suburbs with elevated sandy pine table lands, where malaria cannot find a resting place, and where the hay fever is cured, and

pulmonary troubles are modified. Grove-town, 15 miles from Augusta, on the Georgia Railroad, 700 miles above the sea, and where the poet Paul Hayne lives, has a climate absolutely curative of hay fever.

In fine, Augusta is 1st, a manufacturing center; 2nd, an agricultural center; 3rd, a great cotton mart; 4th, the heart of a broad railway web; 5th, linked to the sea by a grand river; 6th, has a network of railway links to 5 sea ports; 7th, the healthiest city in the South; 8th, has suburbs with climatic antidote to asthma, hay fever, consumption, and malaria; 9th, school facilities equal to any place.

I. W. AVERY.

The BALTIMORE MANUFACTURERS' RECORD, one of the best of papers, whose devotion to the true interest of the South is becoming widely and powerfully known, takes up a large part of its valuable edition of the 11th in telling the story of Georgia's marvellous industrial expansion. In order to make up a complete record for Georgia, our contemporary draws much of its summary of facts and figures from the Chronicle, with proper credit for the same.

We highly appreciate this compliment from so distinguished a source, and mention it, in part, to show our own people that this paper labors for their benefit, and that its work is recognized abroad in a way to benefit the commonwealth.—Augusta, Ga., *Chronicle and Constitutional*.

MESSRS. HOUGHTON, MIFFLIN & Co., of Boston, have just issued CAPTAINS OF INDUSTRY, by James Parton, a most excellent work, especially for those just growing into manhood. It deals with the lives of such men as Elihu Burritt, Robert Owen, Richard Cobden, Henry Bessemer, John Bright, Horace Greeley, James Gordon Bennett, Peter Cooper and others of world wide fame, who accomplished much in life through their untiring energy and industry. The story of how these men by plodding work attained eminence is well calculated to inspire a young man or even a boy with the determination to go and do likewise. The name of the publishers is a sufficient guarantee that the book is gotten up in excellent style. The price is \$1.25.

## List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date Oct. 7, 1884. Reported expressly for this paper by Louis Hagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Blount, Edward, Smith's Mills, S. C. Carriage axle.....	306,214
Boardman, A. E., Macon, Ga. Hydraulic main for gas apparatus.....	306,053
Collins, R. G., Winchester, Va. Garment clasp.....	306,059
Cook, Thomas, Columbus, Miss. Compression pump.....	306,060
Daniel, E. A., Duncanville, Texas. Buckle.....	306,065
Dickson, Mel H., Knoxville, Tenn. Air-brake attachment for railway carriages.....	306,140
Dosh, H. S., Baltimore, Md. Cake machine.....	306,141
Douglas, Jno., Pensacola, Fla. Locomotive.....	306,231
Gardner, Jefferson M., and D. Grewar, Nashville, Tenn. Gas machine.....	306,331
Hanna, Oscar, and H. W. T. Earnshaw, Dover, Ky. Machine for spinning and winding yarn, thread, &c.....	306,246
Judd, A. W., Chattanooga, Tenn. Spoon holder.....	306,258
Munch, Jno. H., San Antonio, Texas. Charger for loading revolvers.....	306,276
Neitsch, F. T., Hallettsville, Texas. Well cleaner.....	306,094
Puckett, T. R., and N. O. Pyles, Coronado, S. C. Ferry-boat.....	306,175
Scheffel, August, Louisville, Ky. Lever press.....	306,112
Schultz, C. A., Belmont, Texas. Plow.....	306,354
Sinclair, J. E., Waverly, Md. Pump.....	306,113
Smith, J. W., Pleasant View, Tenn. Bee hive.....	306,357
Stabler, J. P., Sandy Spring, Md. Central office instrument for telephone lines.....	306,360
Stabler, J. P., Sandy Spring, Md. Individual call instrument for telephones.....	306,361
Wright, Elijah, Coldwater, Miss. Hand power for sewing machine.....	306,370

# CONSTRUCTION DEPARTMENT.

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

## ALABAMA.

The Sheffield Land Iron and Coal Co., office Tusculumbia, Ala., will construct gas works shortly, as previously reported.

J. A. Montgomery, Birmingham, Ala., expects to develop a coal mine shortly.

J. L. Alnutt and others of Birmingham, Ala., have organized an electric light company.

Porter King, J. E. Webb and others, of Birmingham, Ala., have incorporated the Black Creek Short Line Railroad.

## FLORIDA.

W. S. Braswell & Son, of Georgetown, S. C., have removed their carriage factory to Hawthorn, Fla.

## GEORGIA.

A saw mill mill is to be erected at Sylva, Ga.

The Athens Gas Works, Athens, Ga., are being doubled in capacity.

A street railroad company is to be organized in Macon, Ga., by Thos. Willingham, Jr., Hardin Johnson and others.

Mining is being actively pushed in the new gold mines lately discovered in Murray county, Ga.

The Lexington Oil Mill, Lexington, Ga., has been supplied with new machinery.

N. S. Eaves, of Cartersville, Ga., has contract to build a \$10,000 church in Thomasville, Ga.

The Griffin Manufacturing Co., Griffin, Ga., will introduce electric light into their cotton mill.

The Cherokee Iron Co., Cedartown, Ga., will enlarge their furnace, and alter it for using coke instead of charcoal.

## KENTUCKY.

The Fall City and Georgia Mining Co., capital \$50,000, has been incorporated in Louisville, Ky.

Taylor & Crate, of Buffalo, N. Y., and Jones & Bro., of Shoals, Ind., both lumber firms, have purchased 10,000 acres of timber and coal land in Kentucky, which they will develop; price reported at over \$1,000,000; will build railroads, &c.

## LOUISIANA.

The Brush Electric Light Co., of New Orleans will largely increase their machinery.

Simeon Toby, New Orleans, La., has established the Star & Crescent Fibre Mills, for cleansing and curing moss on a large scale; will put in more machinery and enlarge operations.

J. R. Barbour has charge of constructing the water works at Shreveport, La.

## MARYLAND.

A. B. Shaw, Barton, Md., will add flour machinery to his grist mill.

The Maryland Central Railroad, office in Baltimore, will build an engine house and a machine shop.

Luther Brown and S. Fockler, of Smithsburg, Md., are opening a copper mine near that town.

Henry Stockbridge, of Baltimore, and others, have purchased the coal lands at Bowery Furnace, Allegany Co., Md., for \$142,500, and also a smaller tract for \$5,000.

Lewis McDaniel has nearly completed his saw and grist mill near St. Michaels, Md.

The Headlight Copper Co. have opened a copper mine and put in crushing machinery, near Blue Ridge Summit Station on the Western Maryland R. R.

## MISSISSIPPI.

An Ice Factory Co., capital \$10,000, has been organized at Weatherford, Texas, to build an ice factory.

The Tombigbee Wooden Ware Factory, Columbus, Miss., is getting in machinery for making sashes, doors, &c., as previously reported.

E. Moreton, of Chicago, contemplates establishing a \$150,000 furniture factory and saw mill in Yazoo City, Miss.

## TENNESSEE.

The Red Cedar Marble Co., of Knox county, Tenn., has been incorporated.

The Southern Car Works of Knoxville, Tenn., are enlarging their works.

The McNabb Coal and Coke Co., have commenced mining operations near Kelly's Ferry, Tenn.

A large flour mill is to be erected at Chattanooga, Tenn.

The reported burning of Jones Bros. woolen mill, Bolivar, Tenn., was erroneous. Fire was confined to warehouse and dwelling.

Mack Stephens, Dyersburg, Tenn., will rebuild his flour mill at a cost of \$8,000.

## TEXAS.

The Marshall Car Wheel and Foundry Co., Marshall, Texas, whose works were lately burned, will commence rebuilding immediately.

Prof. Arnolds, El Paso, Texas, has received promises of large subscriptions for smelting and refining works.

A New York company is preparing to work copper mines in Knox County, Texas; have already purchased \$27,000 worth of machinery.

The Brenham Water Works Co., Brenham, Texas, have been organized to construct water works.

## VIRGINIA.

D. S. Cook has nearly completed his new furnace at Wilton, Va.

A. E. Randall has purchased four iron ore mines in Clarke county, Va., of W. F. Woodford.

A. H. Leftwich, Lynchburg, Va., is building a tobacco factory.

C. A. Jackson & Co., whose tobacco factory at Petersburg, Va., is reported in this issue as burned, will rebuild at once, and will probably occupy rented buildings temporarily.

## WEST VIRGINIA.

John T. Colston and Thomas Frazier have established a saw mill at Millwood, W. Va.

The Harpers Ferry Milling Co., Harper's Ferry, W. Va., are erecting flour mills to grind 400 barrels of flour a day.

## BURNED.

Saw mill of Isaac W. Hoskins, Brookhaven, Miss.; loss \$5,000.

Flour mill of S. Boutong, Covington, Ky.; loss \$18,200.

A fire at Richmond, Ky., October 8, destroyed C. Zafford's planing mill, loss \$35,000; W. W. Pott's flour mills, \$66,500; and City Gas Works, \$15,000.

The boiler in J. C. Rogers' saw mill, Buchanan, Ga., exploded Oct. 13, killing several men and wrecking the mill.

The tin can factory of H. T. Miller, Baltimore Md., injured by fire. Loss \$4,000.

Ginnery of T. D. Jones, Marion, S. C.—Loss \$3,500.

Carriage factory of Turk Bros., Juliette, Ga.

Texas Asphaltum Works, Dallas, Texas. Loss \$3,000.

Cooper's steam saw mill, Butler, Ga.

J. S. Johnson's mill and ginnery at Waynesboro, Ala. Loss \$3,000.

Works of the Virginia Porcelain Co., Lipscomb, Va.

Green Aldy's mill and gin, Bainbridge, Ga.

J. B. Dale's flour mill, Dodd county, Texas. Loss \$8,000.

C. A. Jackson & Co's, tobacco factory, Petersburg, Va. Loss \$175,000, insured.

Flour mill and gin of Robert A. Ramsey, on Fall Creek, Davidson Township, N. C.

A. J. Campbell & Co's, snuff factory, Petersburg, Va. Loss \$15,000.

## MANUFACTURING.

### BALTIMORE.

THE TUNIS GANG FLOORING MACHINE Co., report their business as very gratifying. orders for this new flooring machine, lately illustrated in the MANUFACTURERS' RECORD, having been received so liberally that the manufacturers have been unable to meet the demand.

MESSRS. DUFUR & Co., manufacturers of wire railing and ornamental wire works, report business as exceedingly active, orders being received from all parts of the South as far down as Texas.

MR. J. W. LOANE, awning and tent maker, N. Gay street, is very busy, orders coming in freely for all kinds of campaign goods. The prospects indicate a brisk business all the winter.

MR. R. SWORMSTEDT, general agent Ewart Detachable chain belting, has just received a very large order for this superior article from a factory in the South. For some time past business has been on the increase.

MESSRS. JNO. C. FROELICH & Co., machinists, are working on two tug boats for parties in the city, and have also on hand a large amount of repairs.

MR. WM. R. EMERSON, general agent E. M. Birdsall Co., has sold a large quantity of the Marseilles goods, such as corn shellers, &c., and has sold some few traction engines and novelty saw mills of the Birdsall make.

MR. JOHN B. ADT, machinist, North Holliday street, is building granulators for a firm in North Carolina and two hoisting machines for firms in the city. He has on hand a large supply of repair work.

### GENERAL.

B. F. RODMAN has located in Washington, N. C., and established the Washington Iron Works. He is prepared for all classes of repair work, and is succeeding well.

MESSRS. AIKIN & LIGHTON, of Birmingham, Ala., who were lately reported in the MANUFACTURERS' RECORD as building a foundry and machine shop, write us that "we are just completing our foundry and machine shop for the manufacture of foundry moulding machinery and general foundry business, making specialties of railroad castings which we make on our machines, and for which they are especially adapted."

A DISPATCH from Reading, Pa., says: The Henderson process of making steel, which is controlled by a dozen leading iron firms of Eastern Pennsylvania, and which is to take the place of the Bessemer process, was successfully tested to-day at Birdsboro. The blooms rolled nicely. The sheets were then cut into nail plate, and iron and steel nails of excellent character were manufactured. The new kind of steel is more pliable, cheaper and more easily worked than Bessemer steel, while it is as tough. The expectation is that it will take the place of hammered and rolled iron altogether.

The Lowell Machine Shop has recently received orders from the Sibley Manufacturing Company, of Augusta, Ga., manufacturers of awning stripes, duck, etc., for \$100,000 worth of new machinery.

SEVERAL months ago three Pennsylvanians, having some money to invest in starting a foundry and machine shop, desired to select a good location in the South. They advertised in the MANUFACTURERS' RECORD for information as to places needing such an industry, and out of the many answers received, were best pleased with one from Jackson, Tenn. After investigation they decided to locate there, and readily secured the aid of business men—among them a banker—in that town in organizing a stock company. The company was organized as the Sherman Manufacturing Co., and at once commenced the erection of the necessary buildings. They have been in successful operation for a month or two, and now again advertise in the MANUFACTURERS' RECORD, this time calling attention to their facilities for business. They make a specialty of automatic engines, slide valve engines, portable and stationary engines, portable and stationary boilers, saw mills and saw mill machinery, pulleys, shafting, hangers, &c. They are also agents for the Ballantine ice and refrigerating machine, and for the Cube Pipe Tongs. They invite correspondence from those needing machinery.

COL. AVERY tells our readers to-day of Augusta, Ga., and the many attractions of that city. The progress of Augusta since 1880, although not exceptionally great as compared with other Southern cities, is indeed remarkable, and from the record of this one city's advance we can see how the South is developing. We are glad to say that the remarkably interesting letters of Col. Avery, which he was compelled to discontinue during most of the summer, will appear regularly hereafter.

PERSONS going to Cincinnati, either on business or pleasure, are advised to stop at the Palace Hotel. It is convenient to the business section of the city, as well as to all points of interest and places of amusement. The cars of nearly every prominent street car line pass its doors, or within a short distance of it. It is a new hotel, splendidly furnished, and provided with every convenience for the comfort of its guests. Its rates are as low as those of any other first-class hotel. Location, cor. Sixth and Vine streets.

## LOCKWOOD, GREENE & CO. MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

## Notes From Dixie.

BY CHAS. H. WELLS.

The recent completion of the Western North Carolina Railroad to Charleston will open up one of the richest fields in the South; already wide awake speculators are down there looking up chances for investment. Real estate is rising in value; land which three years ago could have been bought for fifty cents an acre cannot be had now for less than two dollars per acre—and it is considered cheap at that. A party of Lewiston, Maine, capitalists have bought 13,000 acres simply as an investment, and a Scotch syndicate recently bought 60,000 acres along the Big Pigeon River, heavily timbered with white pine and walnut.

Paul Dumont, chief engineer under the Count de Lesseps, of the great Panama Canal, came down from Washington to Charlotte with me the other day. He is looking up some gold mines in the interest of certain capitalists, of whom Cyrus W. Field is the head. Monsieur Dumont is greatly pleased with the country along the line of the Piedmont Air Line Railway, and says "the possibilities are great." He gets \$5,000 from Mr. Field for an "experimental tour," as he is pleased to term it, of five days.

In the United States, exclusive of the territories, there are 2,294 counties. In these same States there are 51,204 telegraph offices and 25,708 saw mills; half as many mills as there are telegraph stations. The electricians employed number 166,247, while the mills operate 147,956 hands, exclusive of the clerical forces employed.

The centre of interest at the North Carolina State Exposition in progress now at Raleigh is the mineral collection of Prof. William Earl Hidden, discoverer of the famous "Hiddenite" gem, which is found in North Carolina alone. Several exquisite specimens of the gem are exhibited; it is quite as valuable as the diamond, and finds a ready sale at fancy prices. Prof. Hidden is a native of Newark, N. J., and one day while rambling through Alexander County, N. C., he found a crystal of this peculiar green color, which has since been called Hiddenite. He bought the land where it was first discovered, and to-day he will not take less than \$50,000 for a half interest in the mine.

The professor is a young man, and says the mine will yield him a handsome competency as long as he lives. The stones are cut in New York, and are sold to Theodore B. Starr, and to Tiffany, as fast as they can be cut. The density of the gem is greater than that of the emerald which it represents somewhat, although of a much more beautiful color and lustre.

The importance of the North Carolina State Exposition can scarcely be estimated at the North, but its value to the people of that State may be approximated when it is known that it has led to the investment, by Northern capitalists, of nearly \$10,000,000 among the "tar-heels." One gentleman who attended secured from a lumber exhibitor 500,000 feet of black walnut for a prominent New York piano manufacturer; another man bought two mica mines in Mitchell County for some Utica, N. Y., moneyed men. Three gold mines in Daire County were also sold last Friday while I was at the "show."

In my long article in the MANUFACTURERS' RECORD on Southern timber resources, through a mistake, I forgot to credit some extracts on the subject of North Carolina

timber to Mr. C. T. C. Deake of that State. The error was not an intentional one, and I hasten to give Mr. D. the credit that belongs to him.

Randolph County, N. C., is the champion gold bearing county of that state. Gold-washing with a simple iron pan has long been practiced, and in this manner large quantities of the precious metal have been recovered from the sand and gravel of the streams. Gold-washing by means of troughs or rockers has also been practiced with great profit. The wide distribution of the metal in the debris, the presence of bold streams of water, together with an abundance of timber and cheap labor, may eventually make Randolph a noted gold-washing region. At present, however, the chief attention is given to the discovery of gold mines, or veins, in the crystalline rocks. The search thus far has brought to light 27 well recognized gold mines, some of which are very rich. One, the Hoover Hill Mine, is successfully worked by an English company with heavy capital, and is paying a handsome profit. Most of these mines are lying dormant, not being sufficiently developed to attract the heavy capital necessary to work them profitably.

The prosperity of the Southern railroads, especially of those in the Carolinas and Georgia, has occasioned a good deal of comment at Saratoga, where I was a few weeks ago. At that famous watering place the money-kings of this country gather every year to discuss the relative values of railway properties. Since Colonel A. L. Rives took charge of the Richmond & Danville system and infused into it some of that business-like "push" for which he is noted, the earnings of the road have picked up about thirty per cent. I am told. The East Tennessee, Virginia and Georgia, notwithstanding the collapse of one of its principal backers, Mr. George I. Seney, is doing splendidly under its new passenger agent, B. W. Wrenn, formerly of the Western & Atlantic Railroad. Col. Peck, of Charleston, is pushing the "old reliable" South Carolina Railroad to the front and is enlarging its influence. Altogether the owners of stock in these Southern enterprises are to be congratulated upon the progressive strides that are being made.

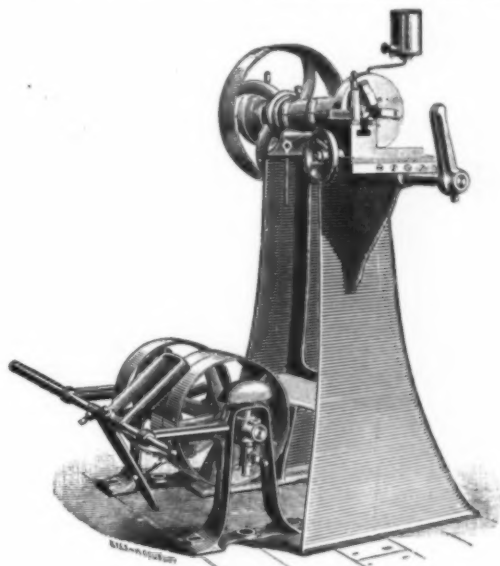
CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

THE *Merchant and Manufacturer* is the name of a neatly printed monthly journal published at San Antonio, Texas.

### A New Cutting-Off Machine.

Forbes & Curtis, of Bridgeport, Conn., have just placed on the market the new cutting-off machine, which we illustrate in this issue, for round stock, (iron, steel, pipe, etc., etc.) from 6 inches to 1½ inches inclusive. This machine is fitted with two chucks; one for steadying the stock, and one for holding the same.

The material used in the construction of this tool is the best, and the workmanship is also first-class. The above firm will be pleased to give further particulars as to floor-space, price, etc., and even fill orders with but little delay.

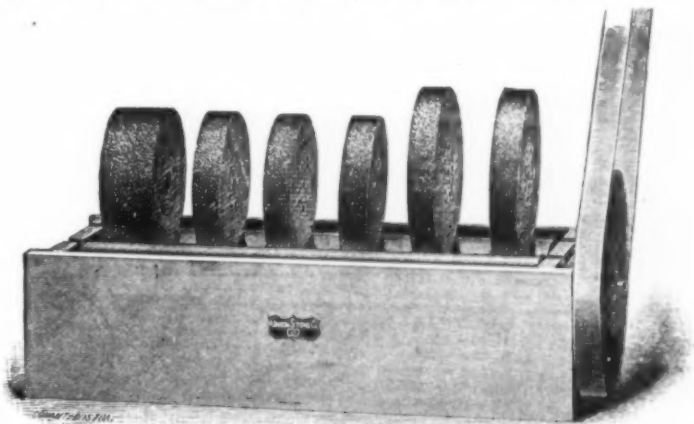


A NEW CUTTING-OFF MACHINE.

### Wood Wheel Washing Machine.

The accompanying cut shows a device by which the worn-out emery coating on wooden polishing wheels may be removed without injury to the wheels, and in less time than it can be done in the ordinary way by hand. It will remove the coating without moistening the leather except on its very surface, and without in the least wetting the wood, thereby preserving the wheels and obviating the usual tendency to warp. A number of wheels may be cleaned at the same time, requiring no longer than it takes to do one.

The prime advantage is the saving of a man's time; being set in motion it will do



WOOD-WHEEL WASHING MACHINE.

the work without further attention.

The principle of the machine is clearly shown in the above cut. The tank is to be filled with water until the rolls are partially submerged, care being taken not to have the rolls gather too much water. The wooden wheels are then to be placed in position, where they will freely revolve by friction of the driving roll, and by their own weight cause the independent roll to revolve. The water which adheres to and is carried over by the rolls is sufficient to soften the glue and the rolls remove the emery without injury to the wheels, and in a comparatively short time—about ten minutes being required to thoroughly clean the wheels. The Union Stone Co., 38 and 40 Hawley street, Boston, Mass., can give any further particulars desired.

### The Magee Art Castings a Triumph of American Art.

In a description of the exhibits at the New England Institute Fair, the Boston Herald says the exhibit of iron castings by the Magee Art Casting Company of Chelsea, Mass., is one of great merit, and calculated to excite more than passing interest in the visitor who has any taste for artistic productions. The examples shown are largely copies of rare old armor, shields and general bric-a-brac. Yet it must be understood that there are many exquisite bits of original work designed by the most distinguished

American sculptors and artists. There are a number of creditable imitations of Japanese bronzes in gold and other surface ornamentation, which is a departure in the art of plating as heretofore illustrated in this country. The artistic qualities, coupled with a knowledge of the handling of metals possessed by Mr. C. G. Pendleton, who has complete charge of the work, is evidenced in every piece shown in the collection. He has successfully produced durable replicas of many valuable curios in old brass colors, bronze, gold, silver, old iron and copper.—In high lights and general effects, the Troy shields and helmets and the unique mantel stove, rich in design, are noteworthy pieces. The enterprise of the concern is manifest in the variety of uses to which they have ap-

plied their art. Friezes, dados, andirons and many other decorative and substantial examples are shown, and there seems to be no end to possibility of production and imitation. In these days of high prices and scarcity of good original antique work, it is a pleasure to know that a perfect color reproduction in iron, smooth in casting and finish, can be obtained and placed within the reach of the lovers of the beautiful. As a whole, the exhibit is one of the most interesting in the fair, and the effective manner in which the display is made is in accord with the high quality of the work.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

### Colt's New Hammerless Double Barreled Shot Gun.

The manufacturers of the celebrated Colt guns, so well-known to the trade, have lately introduced a hammerless gun to meet the demand for that kind of fire arm. These guns are made of the best material and by skilled workmen, and the reputation of the manufacturers gives assurance that they are in every way first-class. The accompanying illustrations shows the outward appearance of this gun, and also the interior mechanism.

The gun is cocked, 1st—by throwing down the barrels, and 2nd—by bringing them back

ing one or both triggers while closing the barrels.

Any further information desired can be obtained from Messrs. A. G. Alford & Co., 116 W. Baltimore street, Baltimore, who handle the Colt fire arms.

### Outlook for Railroad Building.

The Railway Age of Chicago gives the number of miles of railroad built during the first nine months of the year as 2,533, and says that "from present appearances the total length of new track laid in 1884 will not much exceed 4,000 miles. This is the

greatly. Only a small fraction of our vast country is yet supplied with necessary facilities for transportation, and there is little doubt that our present railway mileage, great as it is, will be at least doubled during the present century. Meantime every additional mile of road means the necessity for additional supplies and equipment, both for new construction and for replacement, and manufacturers and dealers in railway merchandise of all kinds have no reason to be discouraged in regard to the outlook for all industries."

The railroad mileage at the close of 1883, the new mileage created in 1884, and the per

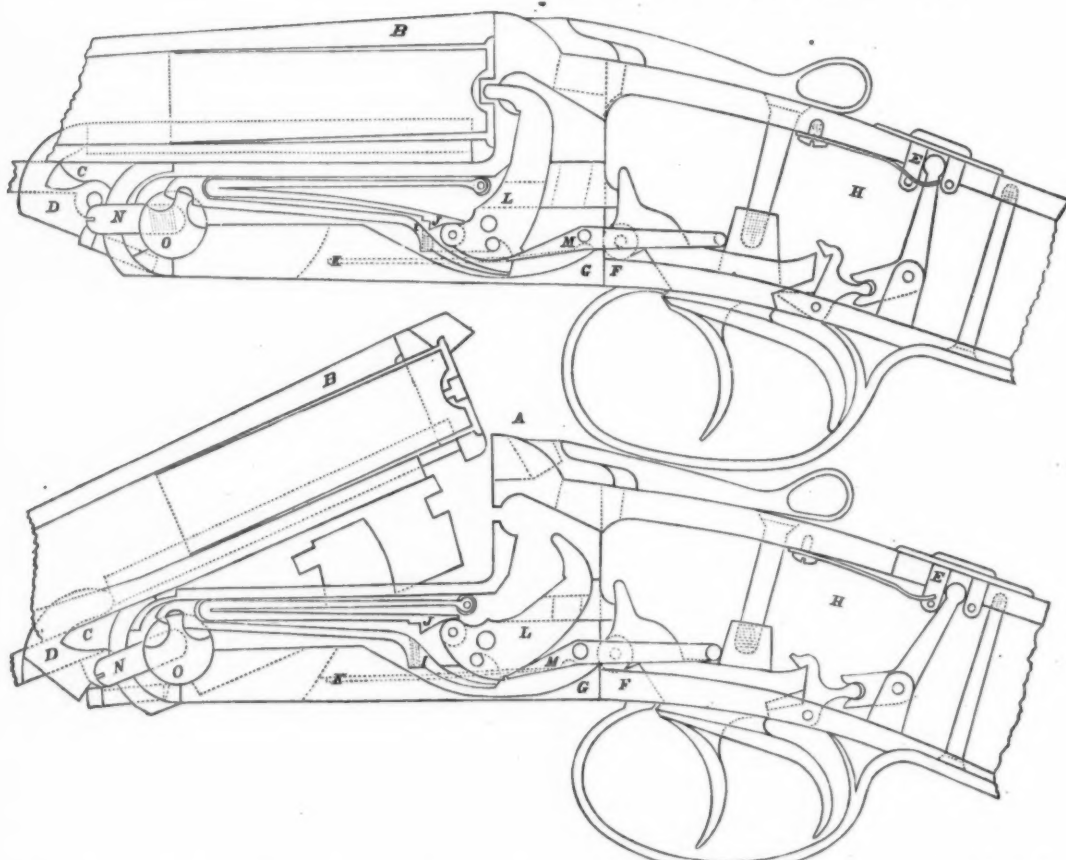
show that railroad building is now proceeding where the necessity of increased railroad facilities is most pressing. This, at least, is a very encouraging feature of the situation.

### Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save \$3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all



COLT'S NEW HAMMERLESS DOUBLE BARREL SHOT GUN.



Vertical sections of the breech action of the gun, showing it: 1st—after it has been fired; 2d—when it has been opened for loading.

into place. An inspection of the drawings shows that the second motion increases the tension of the main spring by pushing its inclined surface above the roll of the hammer, thus utilizing both motions of the barrels and making the forces required to open and close them more nearly equal. The main springs move on rolls, making the friction the least possible. The safety apparatus does not require the cutting away of the stock, so that the stock is very strong.

The triggers are firmly secured by a positive lock, and not by springs. The hammers can be let down separately or together by pressing the safety slide forward, and pull-

ing one or both triggers while closing the barrels. Any further information desired can be obtained from Messrs. A. G. Alford & Co., 116 W. Baltimore street, Baltimore, who handle the Colt fire arms.

cent. of increase on old mileage for the various sections are as follows:

	Mileage, 1883.	New Mileage, 1884.	Per cent. of increase.
New England States.....	6,231	57	0.9
Middle States.....	18,808	277	1.5
Southern States.....	18,846	791	4.2
Western States.....	71,564	1,245	1.7
Pacific States.....	6,143	163	2.6
	121,592	2,533	2.1

The Southern States show by far the largest increase,—4.2 per cent.,—while the Pacific States are next, with a gain of 2.6 per cent. The Western States gained 1.7 per cent., Middle 1.5 per cent. and New England States 0.9 per cent. A careful examination of the record of new mileage will

baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms \$1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city. †

### THE MARKETS.

OFFICE MANUFACTURERS' RECORD, )  
BALTIMORE, Oct. 14, 1884. )

The political excitement has very materially interfered with business, and not much improvement is now to be expected until after the presidential election. It is believed that with the disturbing element of politics out of the way, trade will be decidedly better, and hence business men are anxiously waiting for the 4th of November to pass.

Trade continues quiet, with prices shaded to induce purchasers. We quote nominally as follows:

Ref. Bar Iron, 1 to 6x3/4 to 1.....	1.90	2 c
" " 1 to 4 1/2x1 1/2 to 1.....	1.90	2 c
" " 3/4 to 2, round and square.....	1.90	2 c
Hoon Iron, 1 1/2 wide and upward ..	2.80	3 c
Band Iron from 1 1/2 to 6 in wide...	2 1/2	2.6c
Horsehoe Iron.....	3.20	3.3c
Norway Nail Rods.....	5	5 1/2 c
Black Diamond Cast Steel.....	10	11 c
Machinery Steel.....	4 1/2	4 3/4 c
Spring Steel.....	3 1/2	4 c
Common Horse Nails.....	10	11 c
Railroad Spikes, 5 1/2x9-16.....	2.50	2.6c

The demand for pig iron is only moderate with prices as last quoted, viz:

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	\$28 00	@29 00
Virginia C. B. Charcoal Wheel Iron.....	28 00	@—
Anthracite, No. 1.....	21 00	@23 00
" " 2.....	20 00	@21 00
" " 3.....	18 00	@20 00
" Mottled and White.....	16 00	@17 00

### HARDWARE.

While trade is only fair here, it is much better than at other hardware centres, if reports of extensive dullness elsewhere are reliable. Orders from the South are but moderate, though an improvement in the volume of business is looked for in the near future.

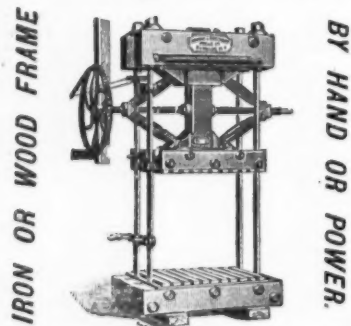
Nails continue weak at from \$2.00 to \$2.10, according to quality with a possible shading on these figures in some cases. Some reports from Wheeling contradict the statements lately published around the country as to the slack demand for steel nails, and say that all nails put on the market have met with quick sales.



**BRASS TUBING.**  
Brown & Sharpe's Gauge the Standard for all Tubing.  
Plain, to No. 20, inclusive.....\$ 35  
Above 5-16 inch to 3 inches, inclusive.....45  
Plain, to No. 21, above 3 inches.....45  
" 5-16 inch to No. 20.....60  
" 1/2 inch.....1.00  
" 3/4 inch.....1.50  
Bronze Tubing 3 cents per pound more than Brass.  
Nos. 21, 22, 23, two cents advance on list for each number.  
Nos. 24, 25, 26, four cents advance on list for each number.  
Above No. 26, special rates.  
All Mandrel-drawn Tubes, 3/8 inch and above, five cents advance on list prices.  
All Mandrel-drawn Tubes under 3/8 inch, twenty-five cents per pound advance on list prices.  
Fancy Tubing to No. 20.....\$0.43  
English, Scotch and Extra Pattern Fancy Tubing to No. 20.....48  
Tubing sawed or cut, 2 to 4 feet long, one cent advance on list.  
Add to one cent one-half cent for each additional cutting under two feet.

**WIRE IN COILS.**  
Old English gauge the Standard.  
Common High Low Gilding, Bronze and Copper.  
All Nos. to No. 16, inclusive.....\$ .22 \$ .26 \$ .30  
Nos. 17 and 18.....23 27 31  
" 19 and 20.....24 28 32  
" 21.....25 29 33  
" 22.....26 30 34  
" 23.....27 31 35  
" 24.....28 32 36  
" 25.....29 33 37  
" 26.....30 34 38  
" 27.....31 35 39  
" 28.....32 36 40  
" 29.....33 37 41  
" 30.....34 38 42  
" 31.....35 39 43  
" 32.....36 40 44  
" 33.....37 41 45  
" 34.....38 42 46  
" 35.....39 43 47  
" 36.....40 44 48  
" 37.....41 45 49  
" 38.....42 46 50  
" 39.....43 47 51  
" 40.....44 48 52  
Spring Wire, 2 cts. 1/2 lb. advance.  
Whitened Wire, 3 cts. 1/2 lb. advance.  
Flat, Square and Half-round Wire 4 cts. advance on Round Wire.  
Fancy Wire not less than 10 cts. advance on Round Wire.  
Spooling on one-pound spools 12 cts. 1/2 lb. extra.  
Spooling on ten-pound spools or more, 2 cts. 1/2 lb. extra.

## Baling Press



IRON OR WOOD FRAME BY HAND OR POWER.

**COTTON, WOOLEN or PAPER FACTORIES**  
—ALSO—  
Lard, Tallow, Oleo., Paraffine, Cotton Seed, Castor Oil, and many other kinds of Presses. Send for circulars.

**BOOMER & BOSCHERT PRESS CO.**  
Syracuse, N. Y.

—OR—  
—219 Fulton St., New York City.—

## Derby Roll Top Desks.

—Best Office Desk in the World.—



Cherry, Walnut, Oak, Ash and Mahogany.

Send for Illustrated Catalogue.

**DERBY & KILMER DESK CO.**  
55 Charlestown St., Boston, Mass.

## Carriage and Wagon Material.

**AXLES.**  
Half Patent, common.....dis 50 %  
Common.....rate 5 %  
Concord.....8 %  
**BODY LOOP ENDS.**  
Lipped, set.....60  
Bolts, Eagle.....70  
**CLIPS.**  
Superior Axle.....dis 40 %  
Norway....." 20 %  
Saddle.....doz set \$17 00  
**CLIP KING BOLTS.**  
Nos. 1 & 2 4  
Flanged, 1/2 doz.....\$2 75 3 25 4 50  
**DASHES.**  
Leather, new list.....dis 5 %  
**ENAMELED CLOTHS.**  
Muslin, 1/2 yard, 5-4.....22  
Drill, " 50 in.....28  
Duck, " 50 in.....38  
Tan Back, " 5-4.....40  
**FELLOE PLATES.**  
Per lb.....10  
**FIFTH WHEELS.**  
Derby, 3/8, 1/2 doz.....\$7 50  
" 3/4, " 1/2 doz.....8 50  
**RUBBER DUCK AND DRILL—25 % off list.**  
SEAT, 1 1/2 x 2 1/2, 1/2 pair.....90  
Buggy, 1 1/2 in. and larger.....10  
1 1/2 to 1 3/4 in.....10 1/2  
Oil-tempered springs 1c. advance from above.  
**SHAFT COUPLINGS.**  
Discount.....40 %  
**MALLEABLE CASTINGS.**  
Rate.....8  
Core.....12  
**POLE EYES AND COUPLINGS.**  
Discount.....40 %  
**H. B. LEATHER.**  
No. 1 Top, 1/2 ft.....28  
" " " ".....23  
" 1 Dash, " ".....10 @10 1/2  
" 2 " " " ".....26  
Fancy Morocco, 1/2 ft.....30 @23  
Bow, 1/2 ft.....24  
Collar, " ".....40  
Harness, 1/2 lb.....40  
**STEP PADS.**  
Per doz, pair.....\$2 25 @7 50  
Spokes, No. 1, 1 to 1 1/2.....\$2 25 set.  
" X, 1 to 1 1/2.....2 50  
" XX, 1 to 1 1/2.....3 50  
Wheels, Sarven Patent.....\$6 50 to 14 00  
**HICKORY FELLOES.**  
X.....1 1/2 1 3/4 1 1/2 1 1/2  
1 25 1 25 1 35 1 60 2 00 2 50  
XX.....3 00 3 25 3 50 3 75 4 25  
**HICKORY SPOKES.**  
No. 1.....1 1/2 1 3/4 1 1/2 1 1/2  
2 25 2 25 2 25 2 50 2 75 set.  
XX.....3 50 3 50 3 50 3 50 3 75  
**HUBS.**  
No. 1.....5x7 6x8 7x9 8x10  
90 1 00 1 35 1 80 2 00 set.  
XX.....5 in. and smaller. 5 1/2  
2 25 3 50 set.  
**FINISHED SHAFTS AND BARS.**  
X.....4 50  
XX.....7 00 doz. pairs

## Business Chances.

For the purpose of making the **MANUFACTURERS' RECORD** a still more valuable medium of communication between its readers North and South, we will publish, **FREE OF CHARGE**, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.  
In corresponding with any of these advertisers please mention the **Baltimore Manufacturers' Record**.

**A SPLENDID OPPORTUNITY.**—One of the best places in the South to establish a factory for making different articles from wood, such as plates, buckets, tubs, spokes and handles, &c. Freight facilities ample and cheap. A cotton factory is needed, and many enterprises could be made profitable. The place is Washington, North Carolina. Address S. J., care of **MANUFACTURERS' RECORD**, Baltimore, Md.

**SAW MILL FOR SALE.**—A 40 H. P. boiler and engine, (Taylor Mfg. Co.,) and saw mill, located in a thriving village in Florida, active building; planer, lath machine, shingle machine, all new and in good running order. Owners sell because they are not practical mill men, but have brought this machinery to develop their property. Big money in it for right man. Box 418, Jacksonville, Fla.

**A GENTLEMAN** who is an expert in the opening and developing of marble and stone quarries, is looking for an opening in the South. Address Harvey, care **MANUFACTURERS' RECORD**.

**WANTED.**—A position as Agent and Superintendent of a Woollen or Worsted Mill, by an English manufacturer of large experience in finest grades of all styles of Men's wear. Would undertake the sale of the product if necessary. Highest testimonials.—Address XV, care **MANUFACTURERS' RECORD**.

**WATER POWER TO GIVE AWAY.**—A good chance for capitalists on Saluda river, S. C.; has twelve feet natural fall; easily improved; desirable for investments; two miles from Williamston; Three miles from Pelzer mills. Address J. R. Wilson, Williamston, Anderson Co., S. C.

**FOR SALE.**—A Tin, Galvanized-Iron Cornice, Gas and Plumbing Establishment in one of the largest and most prosperous inland cities in the South. A splendid opportunity. Special reasons. For particulars address S. B. Lowe, Chattanooga, Tenn.

**WANTED.**—A good location for a saw and planing mill, where timber—poplar, pine and oak—is plenty and stumpage can be had. Address P. Master, Kenton, Obian county, Tenn.

**FOR SALE.**—A cotton mill situated on the line of the Illinois Central Railroad, near the city of Canton, Miss., in a splendid cotton region, good water supply, cheap fuel, labor abundant. The factory would be equally adapted to ginning on a large scale, by improved methods, and cotton-seed-oil mill combined. The property consists of 28 1/2 acres land, lying along the railroad; factory building 100 yards from the railroad, in the centre of the tract, substantially built brick, 200x200 feet; contains one English engine 200 horse, two English lappers, shafting and pulleys. There is a double dwelling-house on the property. Bigsby & Edmonds, Baltimore, Md.

**WANTED.**—Having just patented a new and useful tool, would like to make arrangements with some hardware manufacturer to make them either on royalty or will sell shoprights. Address T. A. P., Box 13, Plymouth, N. C.

**SPLENDID** barrel flouring mill and elevator in Tennessee for sale. On track and river. In perfect order and full operation. For particulars, apply to Meriwether & Gilmer, Clarksville, Tenn.

**COTTON MILL FOR SALE.**—A North Carolina cotton mill, with or without machinery. Well adapted and located for cotton or woollen manufacturing, hosiery, underclothing, rice milling, &c. A great bargain is offered. Satisfactory reasons for selling. Address Bigsby & Edmonds, Baltimore.

**FOR SALE.**—A foundry and machine shop now doing a fair business, which can be largely increased by additional capital. Has a lot of good patterns for engines and mills, boiler tools, &c., reason for selling, bad health of the owner. Address B & P, box 33, Staunton, Va.

**MICA.**—Party with some capital wanted to mine Mica deposits in Virginia. Address Pick, care of **MANUFACTURERS' RECORD**.

**WANTED.**—A situation as manager of a cotton mill by a manufacturer of large experience. Address S. L., care of **MANUFACTURERS' RECORD**.

**MINING ENGINEER** desires engagement as manager or superintendent. Makes assays. Late superintendent large copper mine in North Carolina. Best of references. Address Clarence M. Buel, M. E., 275 18th street, Brooklyn, N. Y.

**YARN FACTORY FOR SALE.**—Stocked with latest improved machinery, and having an established trade in rope, twines, &c. A magnificent opportunity for investment. Bigsby & Edmonds, Baltimore, Md.

**COTTON MILL FOR SALE.**—Built in 1870, in the centre of cotton region; 3,000 spindles; machinery nearly new and first class. Whole can be bought at great sacrifice, or mill will be put into stock company. Full particulars upon application to Bigsby & Edmonds, Exchange Place & Commerce street, Baltimore, Md.

**WOOLEN MILL AND WATER POWER FOR SALE.**—Well located in West Virginia, buildings and machinery new, latter of most improved makes. One of the finest water powers in the State. Address G. W. M., care **MANUFACTURERS' RECORD**, Baltimore, Md.

**CAPITAL WANTED.**—For manufacturing an article on which patent is now pending. A large and profitable business can be done. Address J. C. T., care **MANUFACTURERS' RECORD**.

**WANTED TO BUY.**—A second-hand loom, for making bagging for cotton baling. Address E. O. C., care **MANUFACTURERS' RECORD**.

Young man practically experienced in managing foundry, machine and wood shops, who has made handling help and economical production a study, is open to engagement as superintendent or as working partner in business requiring little capital. References given and required. Address E. L. Ross, Indian Orchard, Springfield, Mass.

## The Gardner Governor.

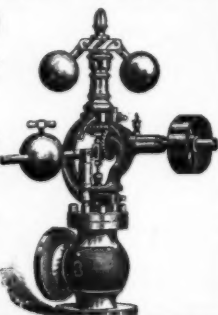
Over 30,000 in Use

Adapted to every style of stationary and portable steam engines.

Warranted to give satisfaction, or no sale. For Circulars and Prices address

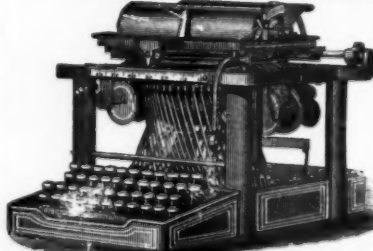
**The Gardner Governor Co.**

QUINCY, ILL.



## REMINGTON STANDARD TYPE-WRITER

THE STANDARD WRITING MACHINE OF THE WORLD.



It does more than takes the place of the pen, as it does the work of two or three penmen, and much more neatly and legibly. The business man will appreciate this saving of valuable time. Dictate your correspondence etc., to a Type-Writer operator and have your time and strength for other matters. (Perfect press copies obtained in same way as of pen writing.) Again the Type-Writer is well-nigh indispensable to overworked professional men. It is a complete relief from the strain of pen-writing. Lawyers have their papers written with the Type-Writer. Many copies can be made at one time, (absolute duplicates) thus multiplying speed. Clergymen write their sermons with the Type-Writer, and hence can read them in a dim light as the manipulation becomes purely mechanical, and owing to its greater speed the mind does not lose its freshness and best thoughts, as when waiting for the slow pen to catch up. In use throughout the world. Perfect satisfaction guaranteed. Send for illustrated pamphlet, with testimonials.

**WYCKOFF, SEAMANS & BENEDICT, 281 & 283 Broadway, New York.**

## SHEET IRON ROOFING.

**Northrop's Patent Cap Seam Iron Roofing.**  
No rivets, screws or nails through the sheets. Easily applied and perfectly watertight.

**CRIMPED IRONS** of various styles for Roofing and Siding.  
**IRON CEILING.**  
**ORNAMENTAL, DURABLE, FIRE-PROOF.**

**A. NORTHROP & CO.**  
97 First Avenue,  
PITTSBURGH, PA.

## FOR SALE Cheap!

- 2, 4-Horse Power Engines,
- 4, 8-Horse Power Engines,
- 4, 12-Horse Power Engines,
- 3, 15-Horse Power Engines,
- 2, 18-Horse Power Engines,
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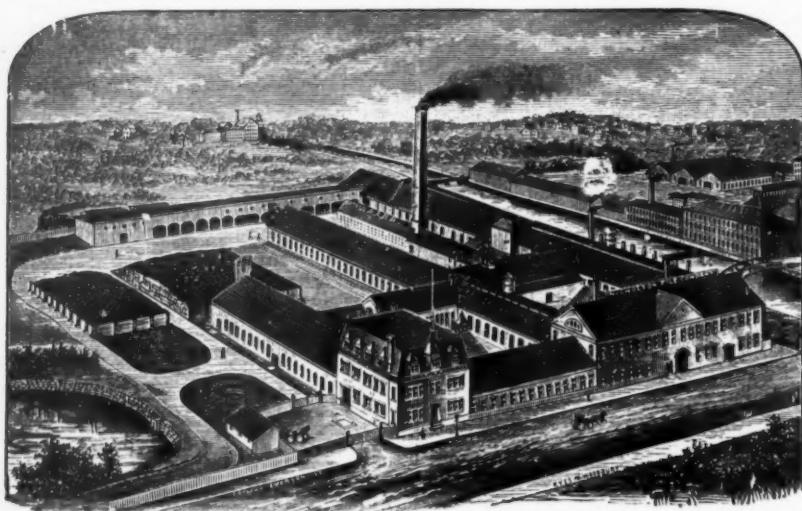
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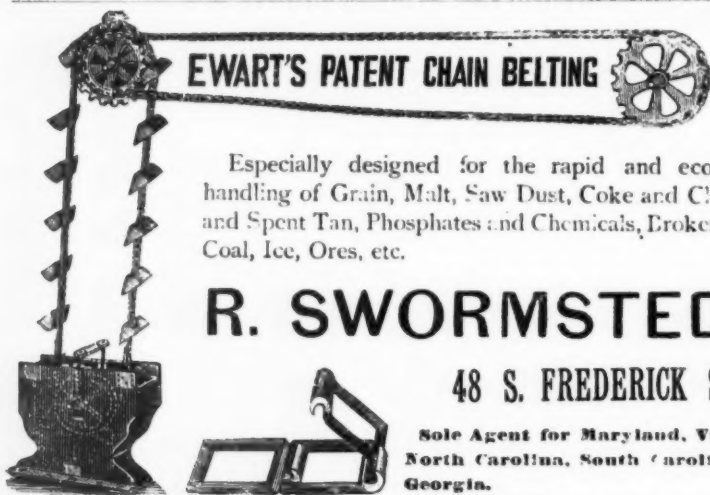
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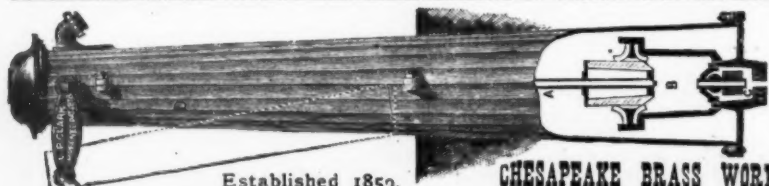
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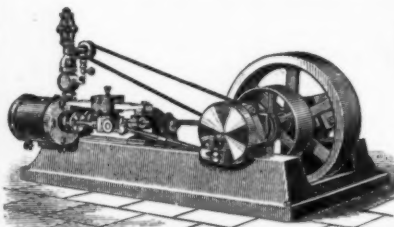
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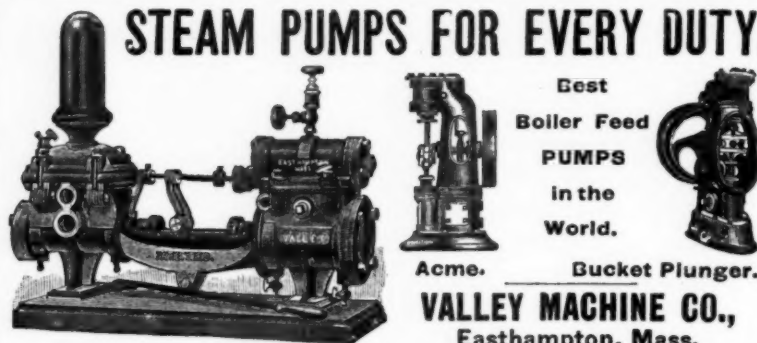
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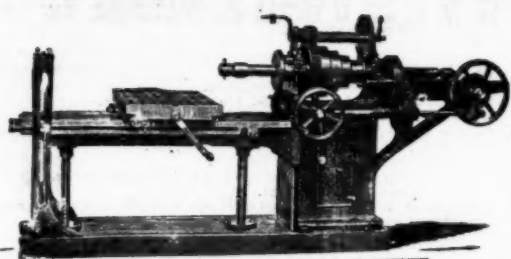
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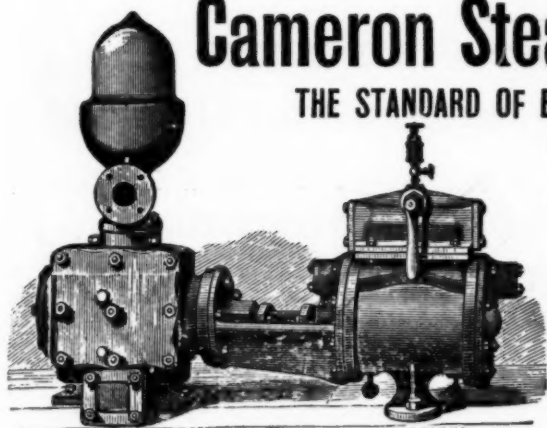
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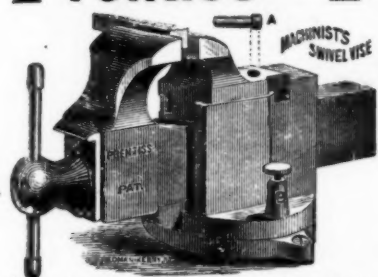
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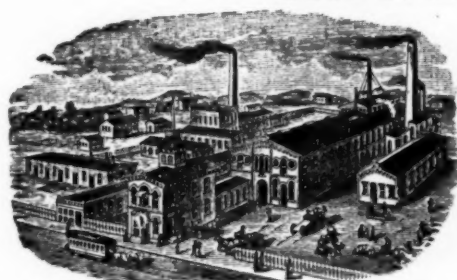
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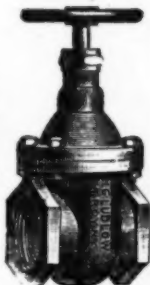
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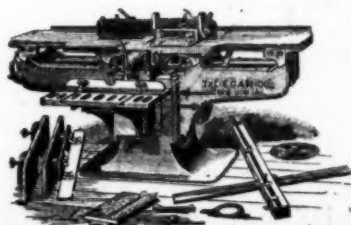
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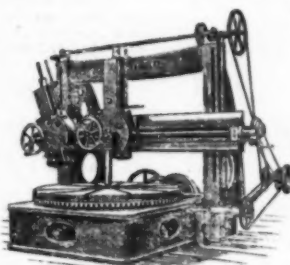
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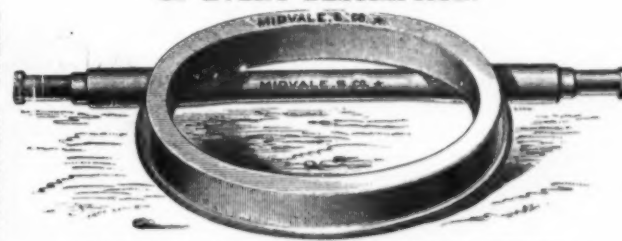


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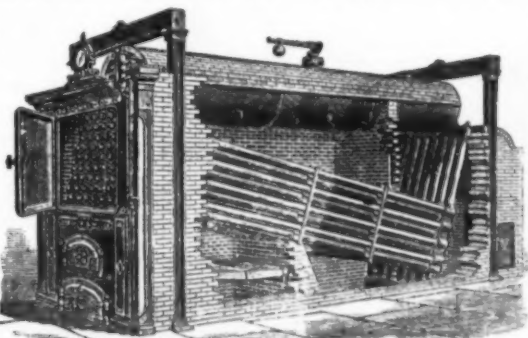
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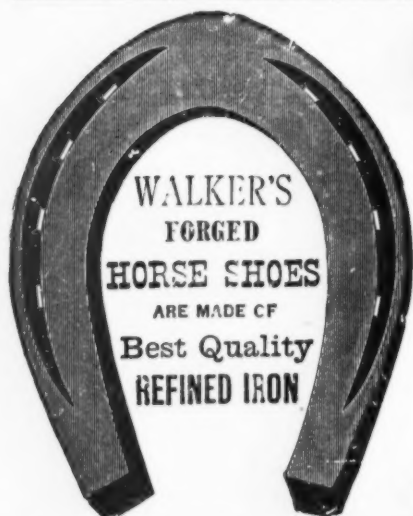
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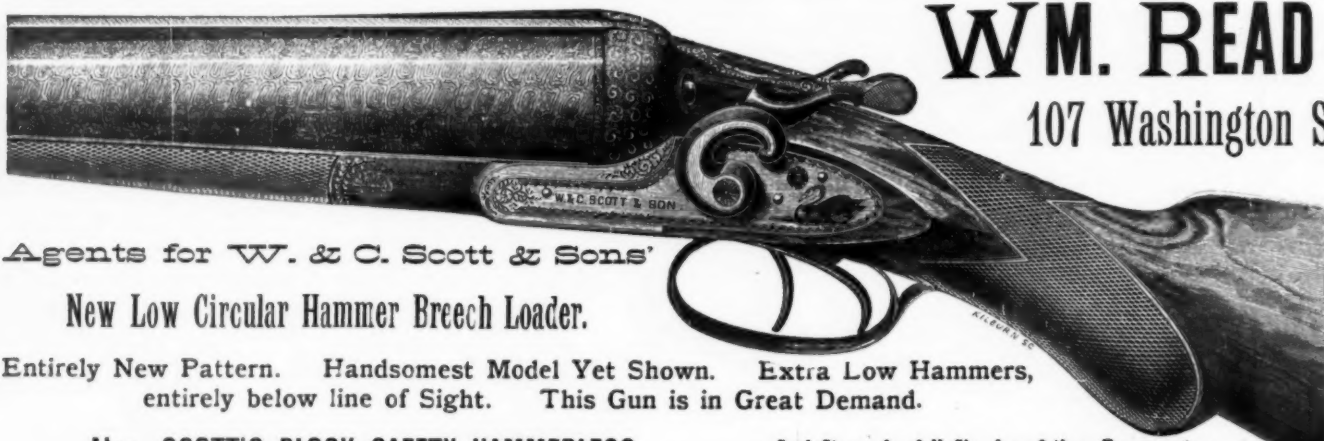
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Bailey's. ....dis 20 & 10 %	Bed. ....dis 10 %	Bradley & Walby's. ....dis 20 %	
Plane Irons, Butcher's. ....dis 50 %	Machine, Flat Head, Iron. ....dis 55 %	Garden. ....dis 55 %	
Plane Irons, Auburn Tool Co. ....dis 20 %	Machine, Round Head, Iron. ....dis 50 %	TRUCKS (WAREHOUSE, &c.)	
Plane Iron, Ohio Tool Co. ....dis 20 %	Bench, Iron. ....dis 50 & 10 %	Handy Truck. ....dis 25 %	
Plane Irons, Sandusky Tool Co. ....dis 20 %	Bench, Wood, Hickory. ....dis 30, dis 10 %	Penfield Block Co.'s list, 1882. ....dis 35 %	
FLIES AND NIPPERS.	Hand, Wood. ....dis 20 & 10 %	Peerless, with Cogs, No. 3. ....dis 40 %	
Button's Patent. ....dis 33 1/2 %	Hand Rail, Sargent's. ....dis 60 & 10 %	Peerless, with Cogs, No. 4. ....dis 40 %	
Hall's Pat. Compound Lever Cutting Nippers.	Hand Rail, Humason, Beckley & Co.'s. ....dis 40 & 10 %	Eureka, No. 2. ....dis 42 %	
No. 2, 5 in. \$13.50; No. 4, 7 in. \$21. ....dis 25 %	Hand Rail, Am. Screw Co., list Jan. 1, '81. ....dis 70 %	VISES.	
Gas Pliers. ....dis 50 %	Jack (Wilson's). ....dis 25 %	Solid Box—Wilson's. ....dis 50 %	
PLUMBS AND LEVELS.	SCREEN FRAMES AND FIXTURES.	Trenton. ....dis 45 %	
Stanley R. & L. Co.'s Pat. Adjustable. ....dis 65 & 10 %	Standard Window Screens No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.	Iron City Tool Works. ....dis 50 %	
Stanley R. & L. Co.'s Non-Adjustable. ....dis 65 & 10 %	Door. ....No. 5, \$15; dis 40 & 10 %	Bench—Wilson's. ....dis 45 %	
Chapin's Patent Adjustable. ....dis 65 & 10 %	Window Corner Irons, No. 3, 4, 5, 6, 7, 8, 9, 10.	Trenton. ....dis 45 %	
Chapin's Non-adjustable. ....dis 65 & 10 %	Door. ....No. 6, \$3. ....dis 40 & 10 %	Parker's. ....dis 25 %	
Standard Rule Co.'s New Adjustable. ....dis 65 & 10 %	Door Latches, per dozen, \$3.60. ....dis 50 %	Prentiss. ....dis 25 %	
Standard Rule Co.'s Non-Adjustable. ....dis 65 & 10 %	Porter's Patent Window	Bonney's. ....dis 35 %	
Pocket Levels. ....dis 65 & 10 %	and Door Screen Frames:	Well Wheels. ....dis 60 & 10 & 10 %	
RAIL.	No. 0. Corners and Sticks complete for a		
Sliding Door, Wrought Brass. ....dis 40 %	three-foot window, per doz sets. ....\$4		
Sliding Door, Ironed Wrt. Iron. ....dis 35 %	No. 1. Set for Window, per doz sets Ironed, ....\$2.40; Nickel, \$5.62		
Sliding Door, Iron, Painted. ....dis 10 & 10 %	No. 2 1/2. " " per doz sets, Ironed, ....\$3.25; Nickel, \$7.50		
Barn Door. ....dis 10 %	No. 4. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Per 100 feet. ....\$2.60 3.60 5.60-dis 10 %	No. 5. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
B. D. for N. E. Hangers. ....dis 10 %	No. 6. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Per 100 feet. ....\$2.10 2.70 .30 net.	No. 7. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
RIVETS.	No. 8. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Iron and Tinned, new list, Dec. 10, 1881. ....dis 40 %	No. 9. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
In bulk, new list, Dec. 10, 1881. ....dis 40 %	No. 10. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Copper Rivets and Butts. ....dis 45 %	No. 11. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Nos. 7 8 9 10 11 12 13 14 15	No. 12. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
per lb. 49c. 50c. 52c. 54c. 56c. 58c. 60c. 62c. 70c.	No. 13. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
RIVET SETS. ....dis 40 %	No. 14. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
RODS.	No. 15. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Stair, Brass. ....dis 25 %	No. 16. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Stair, Black Walnut. ....60c. per doz.—net	No. 17. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
RULES.	No. 18. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Boxwood. ....dis 40 & 10 %	No. 19. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Ivory. ....dis 40 & 10 %	No. 20. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Chapin's. ....dis 70 & 10 %	No. 21. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Stanley. ....dis 70 & 10 %	No. 22. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Stevens & Co. ....dis 70 & 10 %	No. 23. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Stevens & Co. Misellaneous. ....dis 50 & 10 %	No. 24. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
SAD IRONS.	No. 25. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Self-Heating, Charcoal. ....dis 9.00 net	No. 26. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Mrs. Pott's Irons. ....dis 35 %	No. 27. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Enterprise Stair Irons, new list, July 20, '82. ....dis 35 %	No. 28. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Comb'd Fluter and Sad Iron. ....dis 15 %	No. 29. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Common Sad Irons. ....dis 2 1/2 c per lb	No. 30. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
SAND PAPER.	No. 31. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Baeder & Adamson's Flint, 00 2 1/2 x 3. ....\$4.50 per r.m.	No. 32. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Baeder & Adamson's Flint, 2 1/2 x 3. ....5.00 per r.m.	No. 33. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Baeder & Adamson's Flint, Assort'd 4 7/8 x 7 1/8. ....4.75 per r.m.	No. 34. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Baeder & Adamson's Star. ....3.75 per r.m.	No. 35. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Baeder & Adamson's Emery 7 x 7 m. \$6.50 per 11.50	No. 36. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
J. Bartle's Sand, Flint and Emery Paper. ....dis 30 & 5 %	No. 37. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
SASH CORD.	No. 38. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Common. ....dis 10 %	No. 39. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Patent. ....dis 10 %	No. 40. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Silver Braided Lake Hemp. ....dis 10 %	No. 41. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Silver Braid, Lake White Cotton. ....dis 10 %	No. 42. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Silver Braided Lake Drab Cotton. ....dis 10 %	No. 43. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Silver Lake Cable Laid, Bengall Unbleached	No. 44. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Hemp, 17 cts. ....dis 10 %	No. 45. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Russian Hemp, 10 cts. ....dis 10 %	No. 46. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Italian Hemp, 34 cts. ....dis 10 %	No. 47. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
SASH WEIGHTS.	No. 48. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Solid Eyes, in 500-lb. lots and over per lb. 1 1/2 c. net	No. 49. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
SAUSAGE STUFFERS OR FILLERS.	No. 50. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Miles. ....dis 20 %	No. 51. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		
Perry. ....dis 20 %	No. 52. " " per doz sets, Ironed, ....\$4.00; Nickel, \$8.00		

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## Silver-Plated Table Ware,

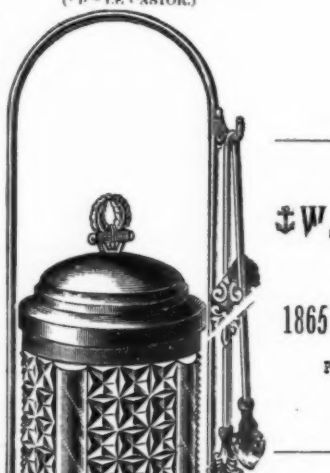
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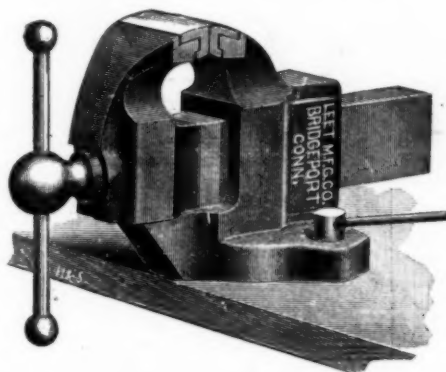
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Patented September 4, 1883.

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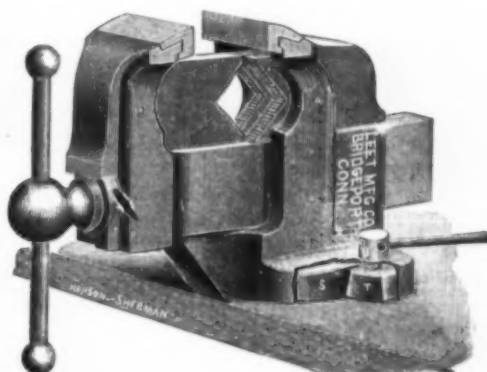
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**THE LEET M'F'G CO.'S**  
**Patent Sliding Jaw Bench Vises.**

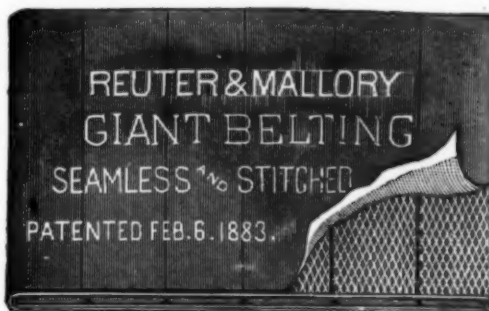
WITH SWIVEL BOTTOM.

These Vises can be used either as a Sliding Jaw or a common Screw Vise by simply turning in or out the small screw in backside of the head or base. It will hold work with a more powerful grip than any other Vise. The screw will never work loose when either chipping or filing. The workman's job is perfect: all the working parts are made of steel and interchangeable. Sold by all Hardware Dealers. Send for Descriptive Circular and Price List to

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This Belt is stitched in seams one inch apart before putting on the outside Rubber Cover, which is made SEAMLESS and therefore cannot split. For endless Belt it is the ACME of PERFECTION, as the splice cannot separate. First cost somewhat more than the cheap Belts generally sold, but well worth the difference. Send for price-list and samples of Belts.

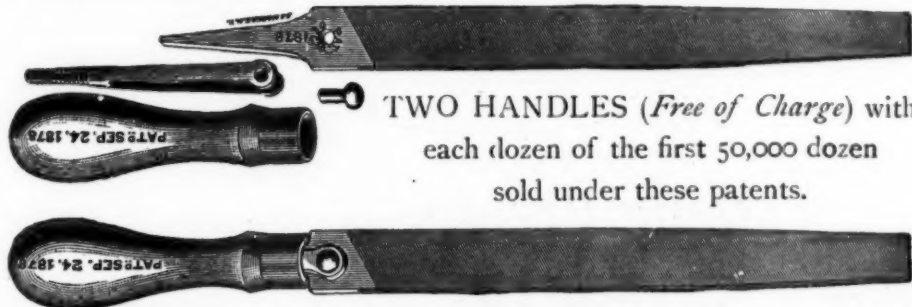
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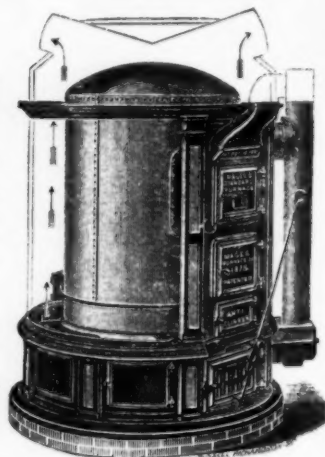
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NEW.

- 1 Engine Lathe, each 10, 11, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 28, 30, 36, 42 and 48 in. swing; length of bed to suit.
- 1 Fox Turret Lathe, each 13, 15 and 16 in. swing; 5 ft. bed.
- 1 Sq. Arbor Lathe, 15 in. x 6 ft.
- 1 each, Hand Lathes, 10, 12, 14, 15 and 18 in. swing.
- 1 Iron Planer, each to plane 18, 20, 22, 24, 26, 30 and 36 in. wide and high; length of table to suit.
- 1 each 16, 20, 22, 23, 25, 28, 30, 34, 38 and 42 in. swing. Upright Drills.
- 1 each, 2, 3, 4 and 6 Spindle Gang Drills.
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- 1 Grant & Bogert Milling Machine.
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- 1 each, 3 and 7 Spindle Nut Tapper.
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- 1 12 in. and 20 in. Cylinder Horizontal Engine.
- 1 each 4, 5 and 6 ft. Arm Universal Radial Drills.

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- 1 " " 20 x 20 x 4 ft. At order.
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All kinds Machinists' Tools and Supplies.  
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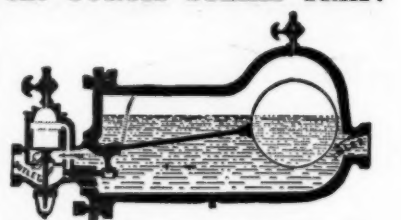
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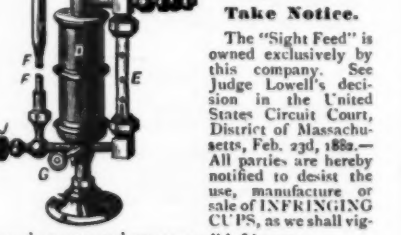
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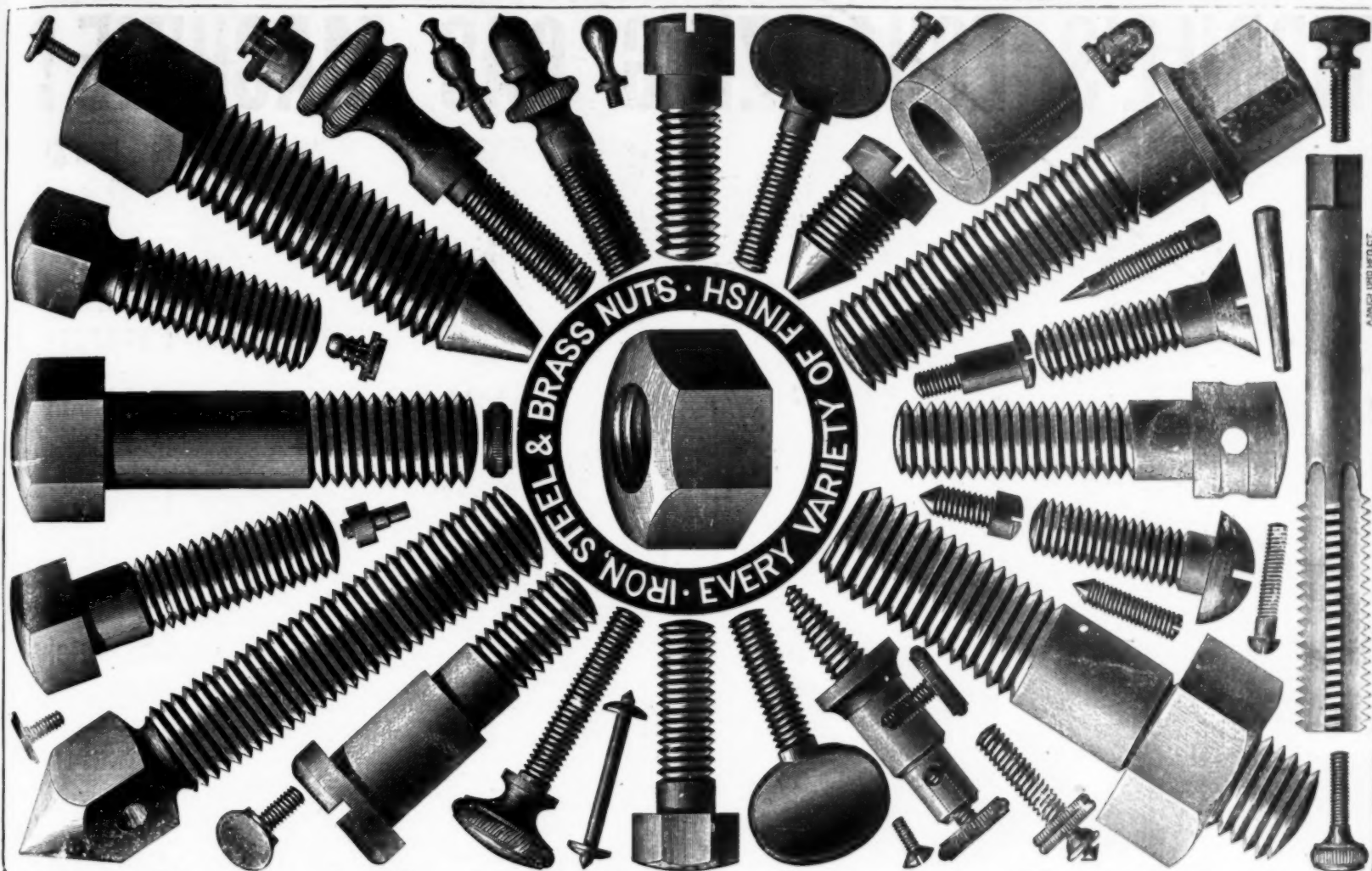
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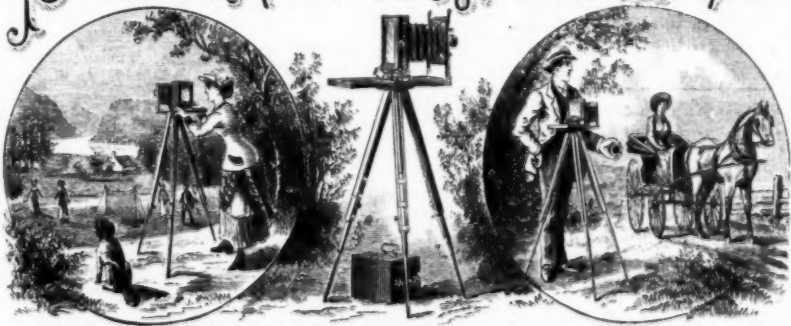
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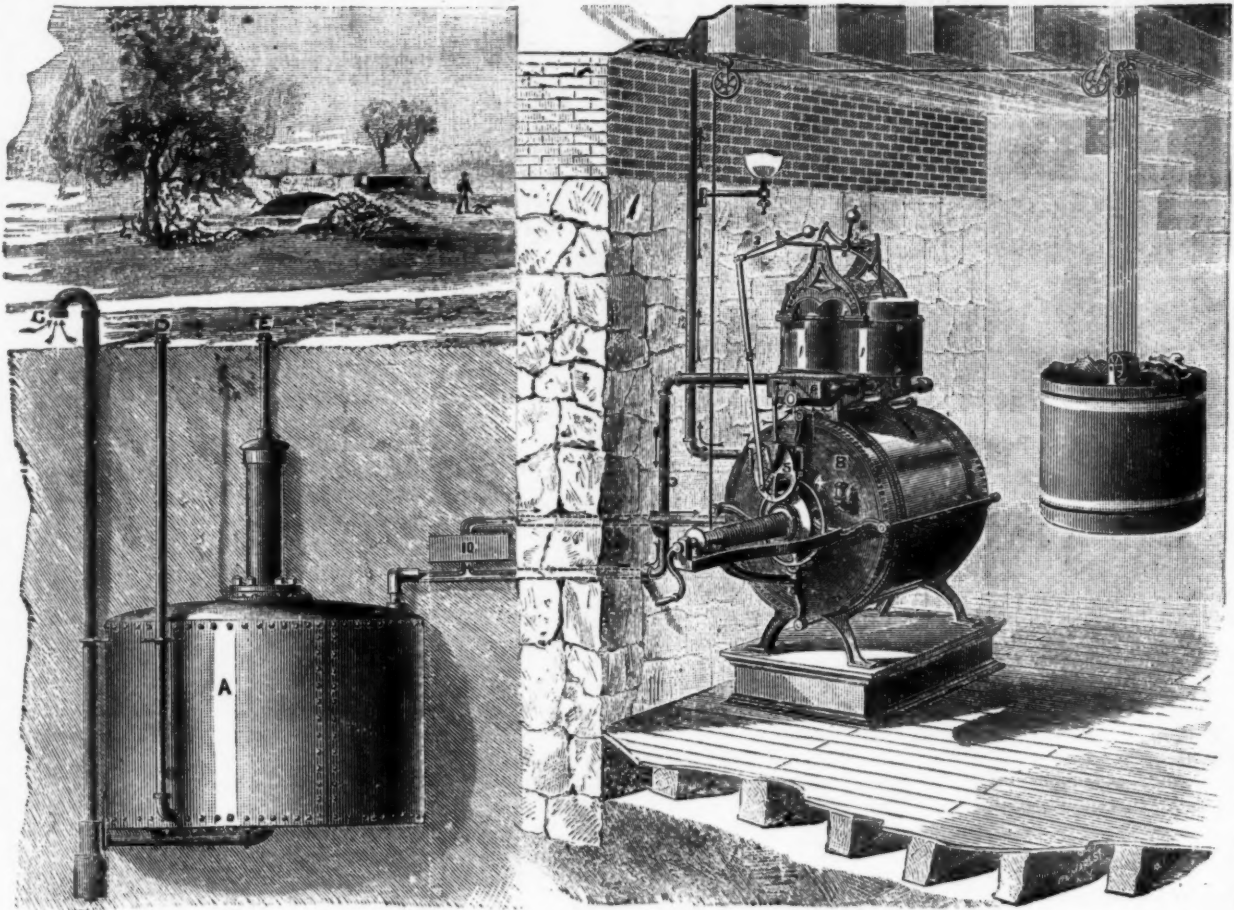
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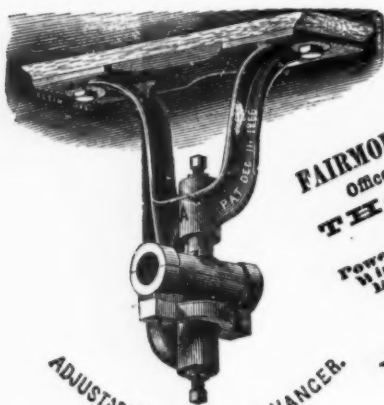
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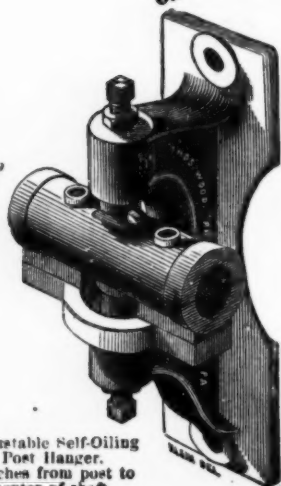
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Ball and Socket  
Self-Oiling Pillow Block.



DOUBLE-BRACED ADJUSTABLE  
SELF OILING HANGER.



Adjustable Self-Oiling  
Post Hanger.  
6 inches from post to  
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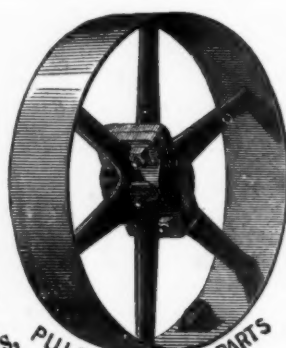
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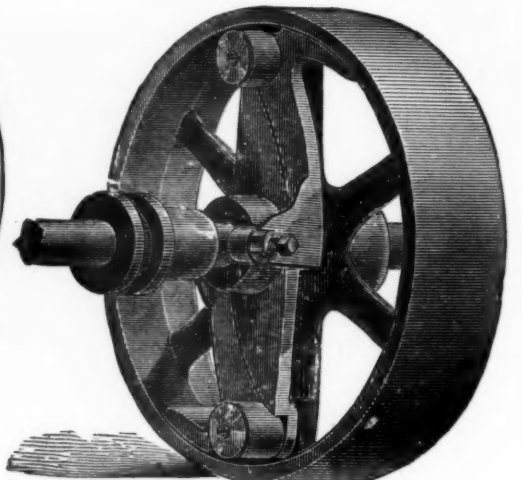
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WITH IMPROVED HECKS.

**SHAFTING,**  
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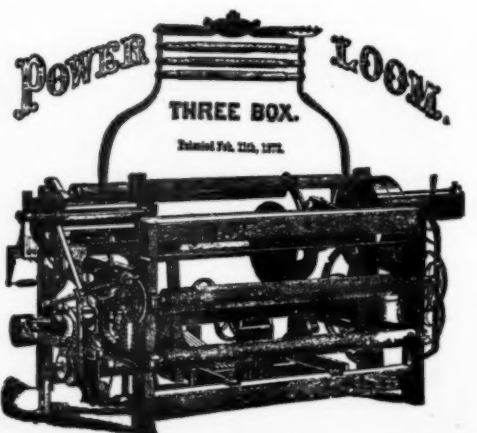
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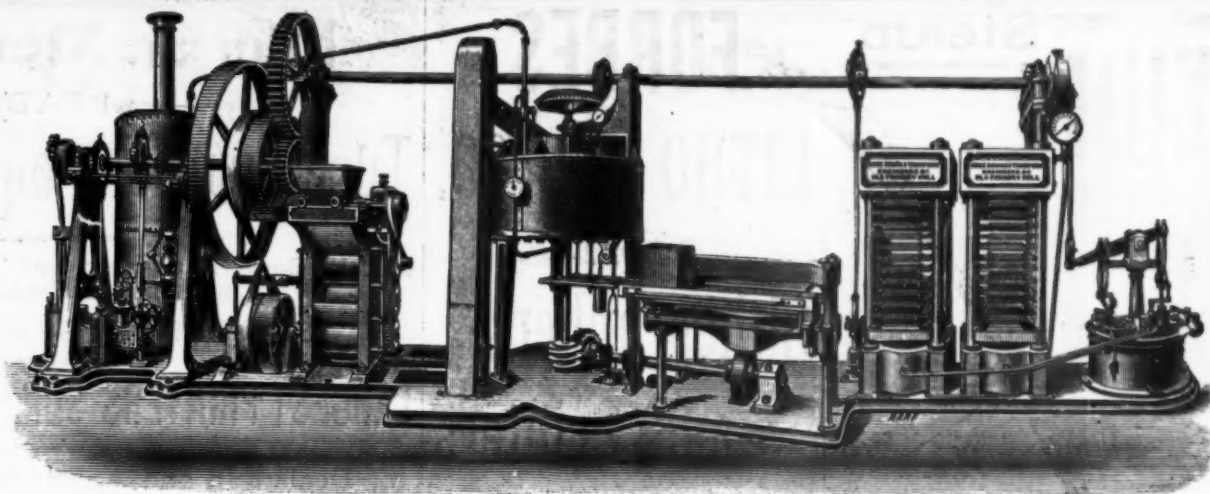
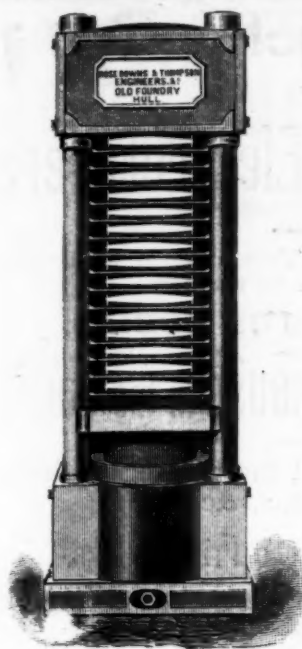
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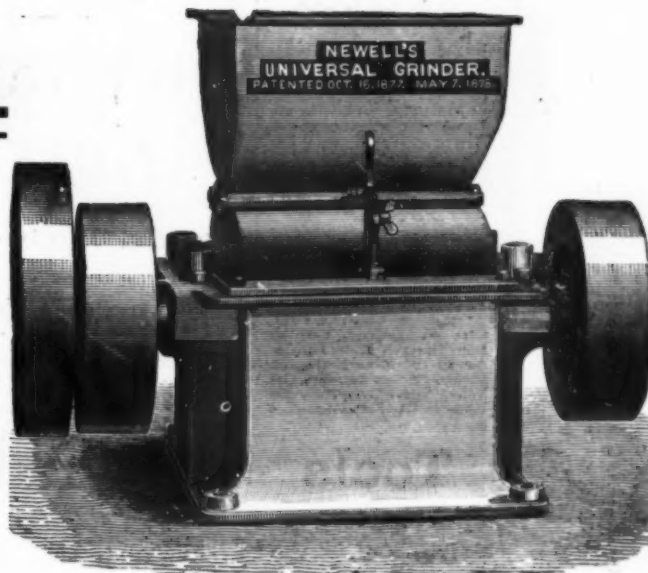
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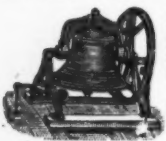
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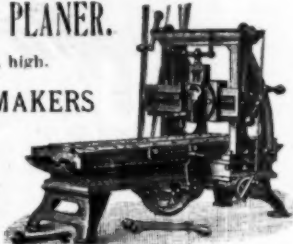
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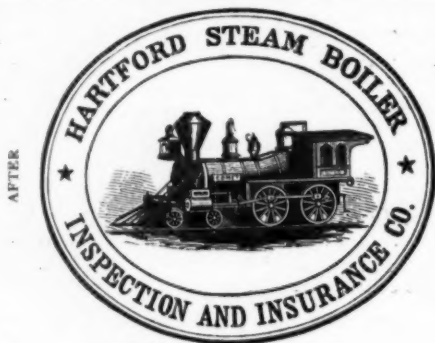
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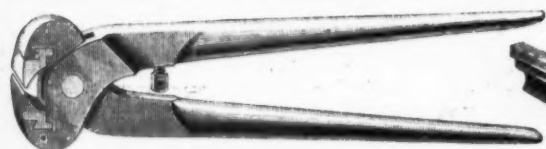
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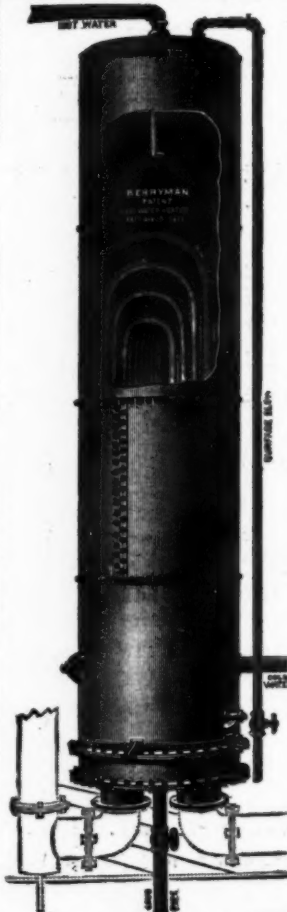
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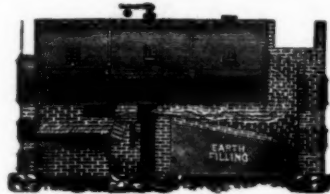
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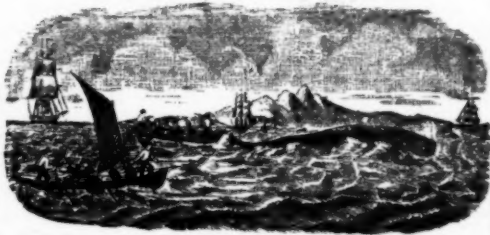
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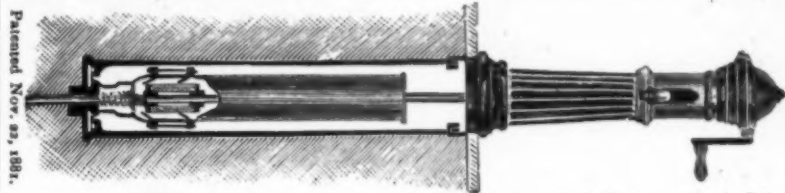
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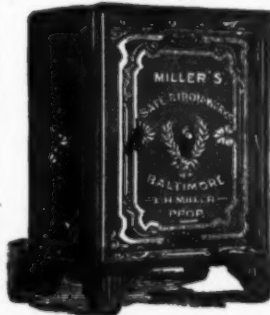
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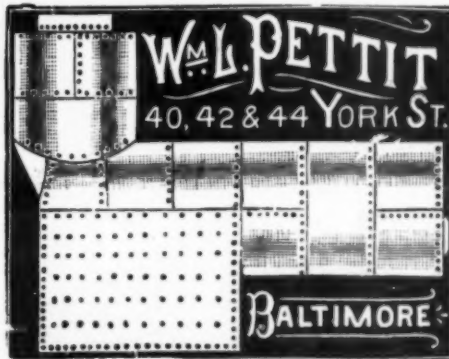
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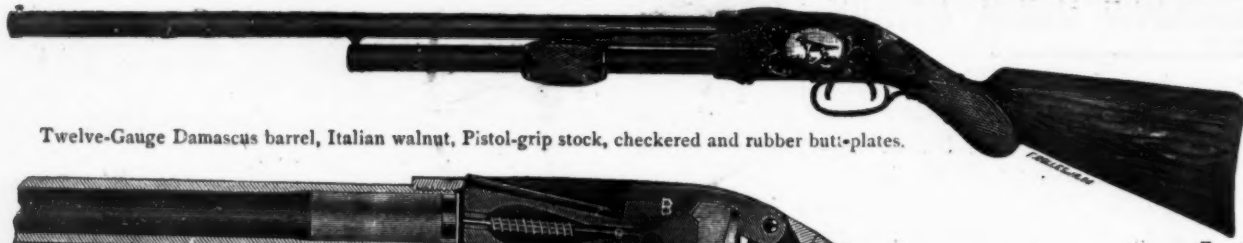
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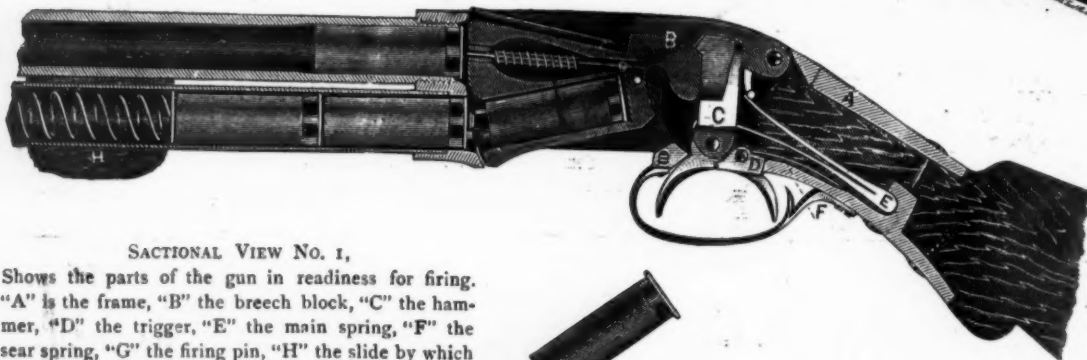
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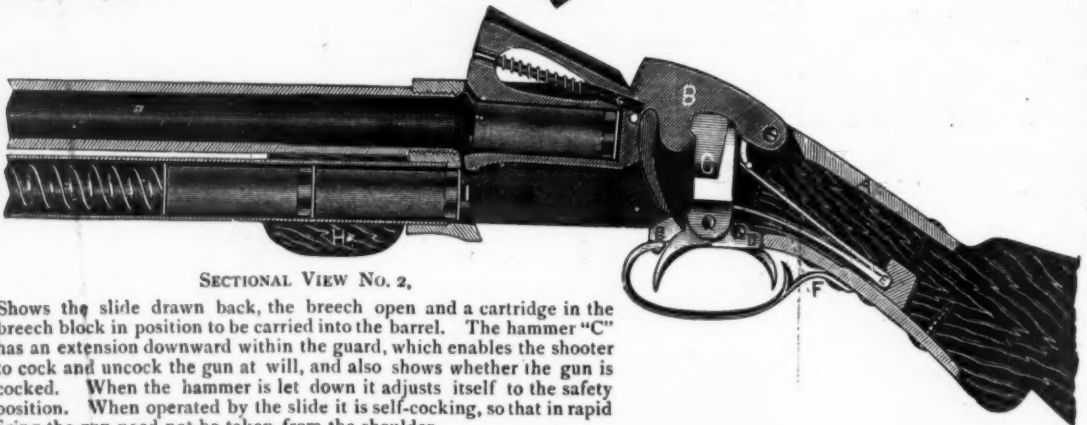


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SECTIONAL VIEW No. 1,

Shows the parts of the gun in readiness for firing. "A" is the frame, "B" the breech block, "C" the hammer, "D" the trigger, "E" the main spring, "F" the sear spring, "G" the firing pin, "H" the slide by which the gun is operated.



SECTIONAL VIEW No. 2,

Shows the slide drawn back, the breech open and a cartridge in the breech block in position to be carried into the barrel. The hammer "C" has an extension downward within the guard, which enables the shooter to cock and uncock the gun at will, and also shows whether the gun is cocked. When the hammer is let down it adjusts itself to the safety position. When operated by the slide it is self-cocking, so that in rapid firing the gun need not be taken from the shoulder.

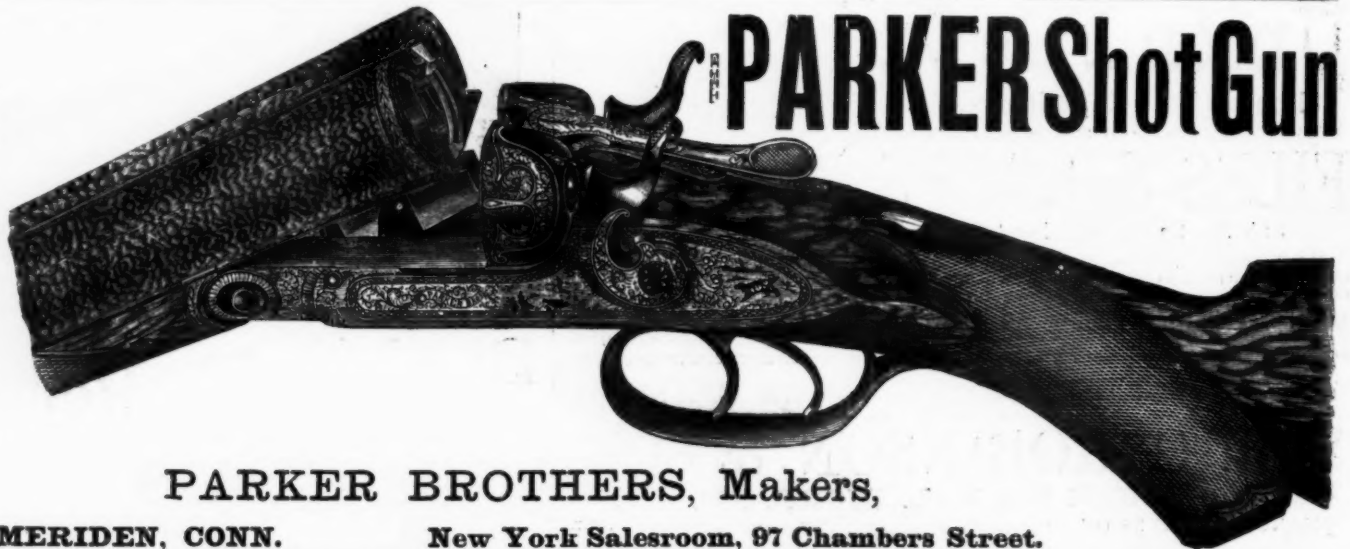
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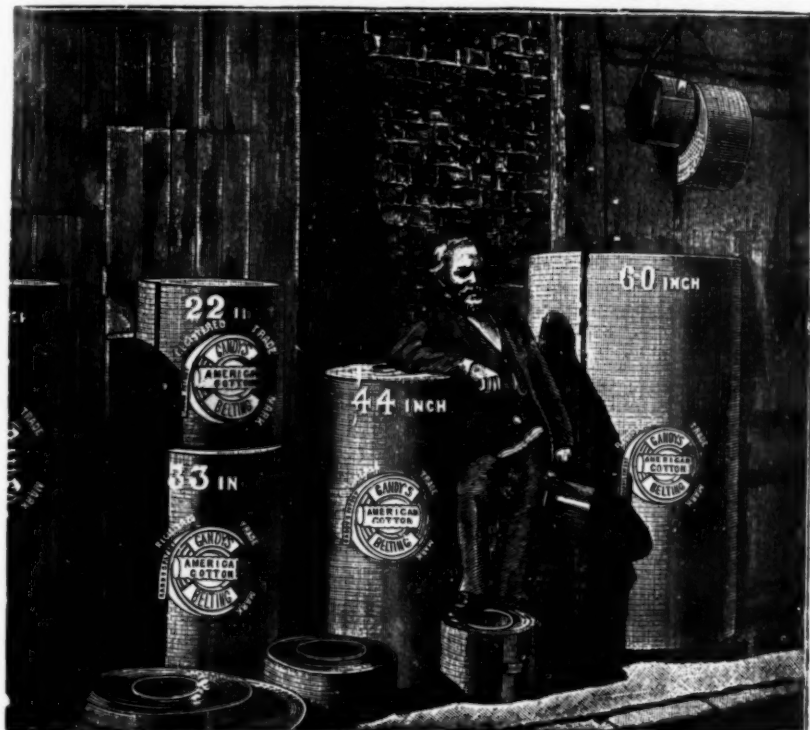
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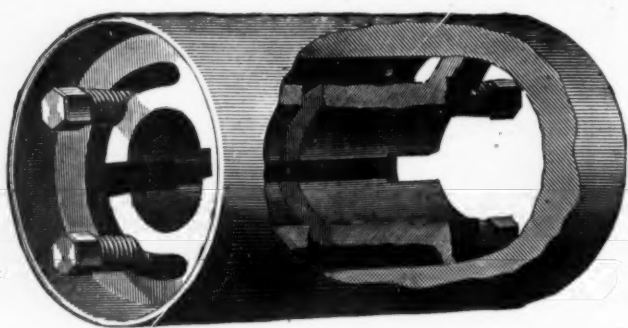
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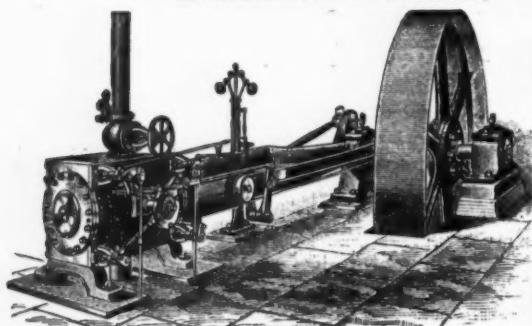
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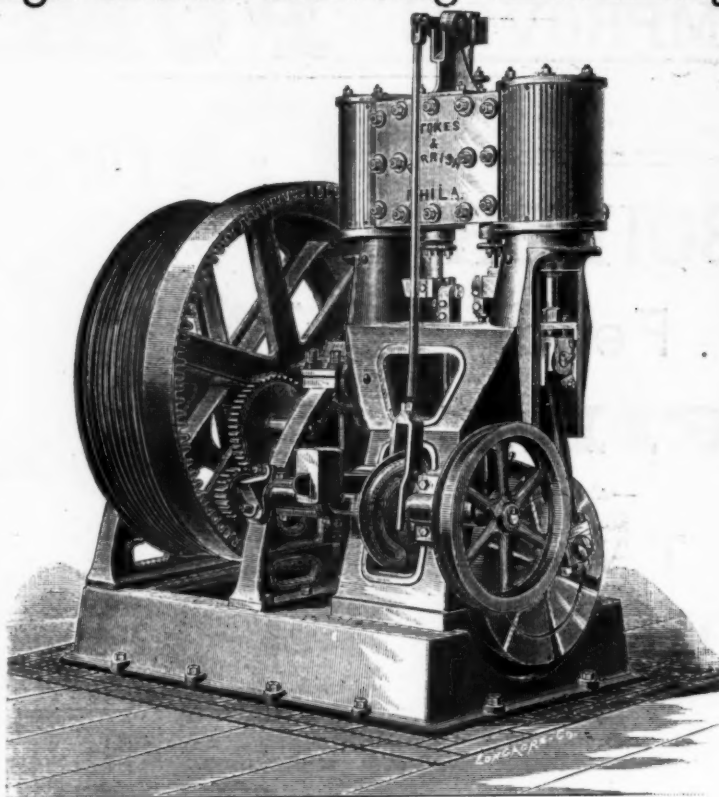
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